



College AND UNIVERSITY Business

FEBRUARY 1952: Fire Insurance Trends * Staff Communication
Technics * Combating Dutch Elm Disease * Collecting Student
Loans * College Ethics * Maintaining Proper Food Inventory



Only Honeywell has this "magic" ventilation control that helps stop classroom shivers!

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So whether you're modernizing or building a new school, call Honeywell. Or for a copy of the booklet "Honeywell Control Systems for the Modern School," write Honeywell, Dept. CB-2-28, Minneapolis 8, Minn.

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constant
comfort
in any
weather!



Whether your school is old or new, you can install this Reset-Relay—the finest pneumatic control ever developed. (Shown above under the Honeywell Gradustat.) It can be used on pneumatic heating, ventilating or humidity systems—wherever a close control of temperatures is desired. It reduces temperature "lag" by 90%, gives greater stability with no "hunting" or "cycling," and allows you to keep the temperature constant no matter how severe or mild the weather.

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plumbing wholesaler



Merchant Goes to Customer — Early Yankee Style. It's likely that in your family's early history the womenfolk patronized the horse-drawn "store on wheels" and relied upon it for many simple necessities.

STORE GOES TO CUSTOMERS ...MODERN STYLE

• The 77 year old, progressive HECHT CO. is making it easy for people to buy. Across the Potomac from the nation's capital this new, huge shopping center, with its world's largest indoor parking facilities draws customers to a modern and complete department store. The site chosen for this innovation is an 18 acre area in Arlington, Virginia, appropriately named Parkington. Soon approximately thirty other stores

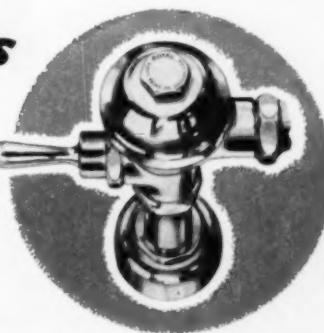
will be built in this new home-serving development. When planning the HECHT building in this multi-million dollar shopping center it was logical that highest standards were set for every detail of construction and equipment. Thus SLOAN is exceedingly proud that its *Flush VALVES* were installed throughout—another example of preference that explains why . . .

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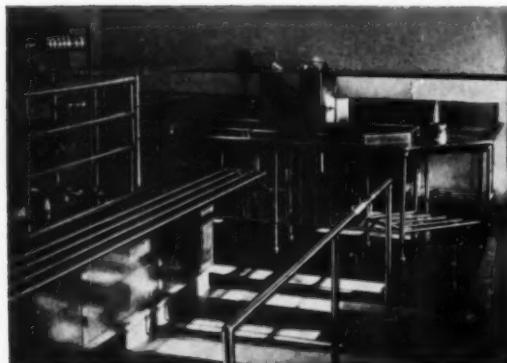
Another achievement in efficiency, endurance and economy is the **SLOAN Act-O-Matic SHOWER HEAD**, which is automatically self-cleaning each time it is used! No clogging. No dripping. When turned on it delivers cone-within-cone spray of maximum efficiency. When turned off it drains instantly. It gives greatest bathing satisfaction, and saves water, fuel and maintenance service costs. Try it and discover its superiorities.



IDEAS

from PROMINENT FOOD SERVICE INSTALLATIONS

Famous Phillips-Exeter Academy features Blickman-Built equipment with novel heated serving shelves



STAINLESS STEEL DISH TABLES (against wall) — small compact unit designed for efficient operation. Raised rolled rim prevents spilling of liquids on floor. Note all-welded stainless steel understructure and pear-shaped feet, which are adjustable. Cafeteria counter at left has cantilever brackets supporting plate glass shelves. This construction eliminates obstructions, leaves counter space free and minimizes dish breakage.

STEAM-HEATED SHELVES feature this stainless steel serving counter in Dunbar Hall. Loaded dishes placed on the shelves are kept hot and palatable while awaiting pick-up by waiters. Note the highly-polished, sanitary stainless steel surfaces. In the years to come, they will remain as bright and clean-looking as they do today.

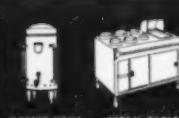


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Business

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Vol. 12, No. 2, February 1952



February 1952

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Among the Authors



John Waldman

JOHN WALDMAN, director of publications at Pace College, has given consideration to the problem of staff communication on a college faculty and reports his technics on page 23. He has been a staff member of the college since 1948, when he became an instructor in the English department, but was appointed to his present position in 1950. He was a free lance writer for two years following his career

in the army, where he was awarded a bronze star for combat action in Germany. Though he works in New York City, he shows no inclination to become a suburbanite and says he "lives right in Manhattan by choice." He does like to get away from the city occasionally as is indicated by his desire to fish for large-mouth bass, but he returns to the city to indulge his other hobbies of playing with his two children and listening to music recordings. . . . HARVEY SHERER, assistant business manager of Oregon State College, is disturbed about the current tendency of college administrators to invest heavily in government bonds and outlines his reasons for this attitude on page 28. Following World War II experience as an army officer, he entered public accounting work in Nashville for two years and later was a member of the administrative staff of Upper Iowa University. For more than a year he was a full-time staff member of the committee on preparation of the manual on college business administration. He says he personally owns government bonds, too!



G. F. Baughman

GEORGE F. BAUGHMAN, business manager of the University of Florida, is an aggressive young man who believes in getting things done, as is attested to by the initiation of a service center for university students described on page 36. Though starting his professional career in the banking business, he left for a six-year stretch as a naval officer and was supply officer in charge of the lend-lease program in all theaters of war from 1941 to 1945. He collaborated with Edward R. Stettinius in writing the book "Lend Lease, Weapon of Victory," which was published by the Macmillan Company in 1944. During this period of his career he traveled in 64 countries. Upon leaving the navy in 1945, he became assistant business manager of the University of Florida, and in a few years was named to the business manager's position. His hobbies are model railroading and gardening; his special tastes, "blondes, pastel colors, and southern atmosphere."



John W. Kidd

JOHN W. KIDD, resident adviser of Abbott Hall at Michigan State College, reports on page 45 the significant factors to be considered in maintaining high residence hall morale on campus. Before joining the Michigan State College faculty in 1947, Mr. Kidd had been an instructor in the department of social science at Louisiana State University. During the war he served as assistant to the educational officer of the U.S. Merchant Marine School at Pass Christian, Miss. At the present time he is assistant professor in the department of social science at Michigan State, as well as serving as resident adviser in the men's residence halls. He is a member of the National Council for Social Studies and of the American Academy of Political and Social Science.

Monroe

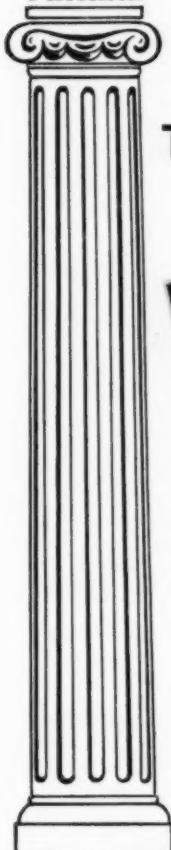
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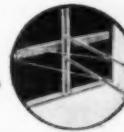


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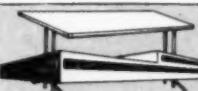


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Questions and Answers

Routine Maintenance

Question: What should be the relationship of the buildings and grounds department to residence and dining hall facilities as to (a) responsibility for routine maintenance and cleaning, and (b) mechanical maintenance and repairs?—E.R.L., Va.

ANSWER NO. 1: The answer to this question will depend somewhat on the size of the operation and the administrative policies that exist. If the housing and dining facilities are of fair size and are set up to be substantially a self-sustaining operation—which I believe generally should be the case—then in order to have proper controls and in order to avoid divided authority:

It follows that the responsibility and supervision of the staff for the routine maintenance and cleaning should be directly controlled and supervised by residence and dining hall management.

It likewise follows that the control of the mechanical maintenance and repairs should be primarily the responsibility of the dining halls and housing director. However, the buildings and grounds department should serve as the top university consulting agency and should be providing the expert engineering advice. In most cases work of a nature requiring skilled trades should be supervised by the buildings and grounds engineers. A practical solution to this is in effect in many institutions by having the skilled trade services provided on a work order basis.—LEE BURNS, director of dormitories, University of Wisconsin.

ANSWER NO. 2: For many years, at our school, the responsibility for routine maintenance and cleaning in our residence halls was placed upon the housemothers and in the dining hall upon the dietitian. Although in general this proved to be a satisfactory arrangement, occasionally there were some difficulties. The principal difficulty was that since we rely almost entirely on student labor for our cleaning, the maintenance department had to supply the students with the cleaning equipment and supplies and fre-

quently had to show them how to use the equipment. There was, therefore, no unification of supervision. The second principal difficulty encountered was a lack of standardization of supplies and materials used, which made the job of purchasing a little more difficult than was necessary.

We recently have changed the system, placing the entire responsibility of routine maintenance and cleaning on the maintenance department. It is, of course, clearly understood that the housemother and dietitian will keep close check on the work done and report to the maintenance department when the work is not being done properly. Should any serious conflict arise between the maintenance department and the dietitian or housemothers concerning the cleaning, it will be the responsibility of the business manager to solve the problem as both departments are under his jurisdiction.

As to the mechanical maintenance and repairs, we believe it is the responsibility of the maintenance department for the entire physical plant, including both the residence halls and dining hall. Frequently such repairs and maintenance require the services of skilled workmen and it is obvious that the maintenance department should handle such work, rather than have any other person handle it.—W. STEWART McCREADY, business manager, Geneva College.

If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.

Centralized Purchasing

Question: Is centralized purchasing practical in a small college?—C.S.R., Pa.

ANSWER: Yes! We believe it is. We have an enrollment of about 950 students now but when our enrollment was only about 600 we started a centralized purchasing program. It has saved us several thousand dollars annually since 1937. The assignment of one person full time or part time with authority to act in the best interests of the institution can be justified by the extra savings that will be developed.—C. L. HOUGH JR., purchasing agent, *The Principia*.

Staffing a Cafeteria

Question: How many full-time employees would be needed to handle the operation of a cafeteria serving 275 persons in a period of 25 minutes with a seating capacity of 100 in the dining room?—A.L.R., Tex.

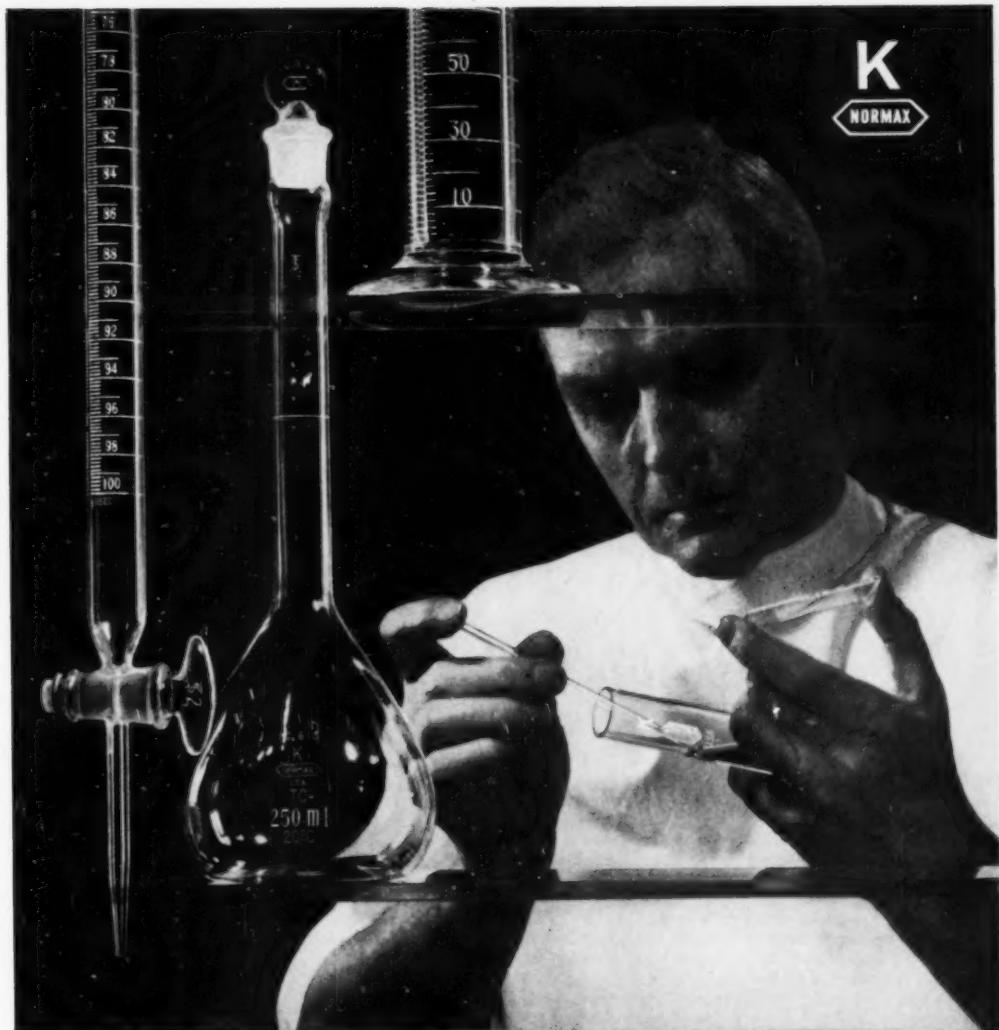
ANSWER: Your serving time of 25 minutes with a seating capacity of but 100 seems a little difficult to understand.

If we were setting up such a plan, the following could be used: one supervisor or dietitian, two cooks, one salad person, one baker and swing cook, and one dishwasher. Those are full-time employees assuming you are serving seven days per week. In addition, you might use the following student employees:

| | Dishroom | Floor | Serving |
|-----|----------|-------|---------|
| B — | 3 | 5 | 3 |
| L — | 2 | 5 | 3 |
| D — | 2 | 5 | 3 |

The "dishroom" and "floor" students can be switched to either position depending on load of work at the time. The supervisor or dietitian could be used as cashier or checker if necessary to save one employee.

Such advice is a little hard to give accurately unless the operation is actually seen, as kitchen area, serving counter, and preparation areas differ greatly from one institution to another.—WILLARD E. BUNTAIN, director of dormitories, Northwestern University.



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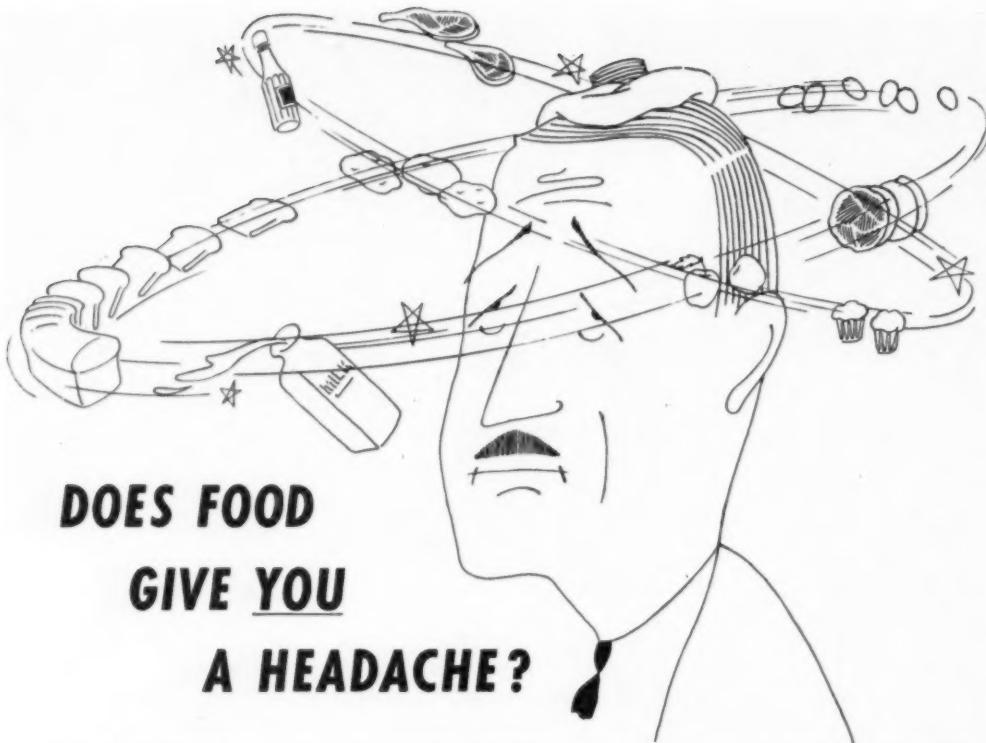
WHEN THE CHIPS ARE DOWN, the quality of food, clothing, weapons and equipment can spell disaster or victory.

Today, as America builds her defenses, thousands of scientists and their many intricate glass weapons—precision instru-

ments—are needed to check the quality of this materiel before it goes overseas. And, too, new clothes, new weapons, new foods and new equipment must come from research laboratories to keep pace with the changing exigencies of world conditions.

Kimble is humbly proud to contribute to our national defense, and is determined to keep American scientists armed with whatever glass weapons they need to do the work that will some day bring real and lasting peace.

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DOES FOOD GIVE YOU A HEADACHE?

Many a school administrator finds food his biggest headache.

And we don't just mean the students' remarks about the food.

We mean the *money* end of the dining hall . . . the buying end . . . the administrative end. The bookkeeping, profit-and-loss end.

In today's market of rising costs, bursars are constantly faced with the problem of balancing a food budget that must take care of wages, equipment upkeep and many other details as well as the cost of food alone. What's more, the food that *is* served must not only be nutritious enough to serve its main purpose of keeping students healthy, it must also be delicious enough to rival mother's cooking and in sufficient variety not to be labeled monotonous!

FOOD SERVICE SPECIALISTS

This seemingly impossible problem is being solved with a minimum of effort by certain forward-looking administrators who have simply turned it over to an outside specialist: Crotty Brothers, Inc.

This firm, headquartered in Boston, has specialized in food service management since 1930.

Crotty Brothers has 10 regional supervisors, each of whom works

directly with the dining hall operators in his region, thus assuring constant supervision of the operation. The operation, of course, is under the school administration's control, but all details within the operation are taken off their shoulders by Crotty Brothers. An expertly trained staff takes care of restaurant personnel, food procurement, storage, preparation, handling. It works closely with the college or university, filling its particular needs, likes and dislikes and those of the student body. Administrators benefit from the complete resources of the Crotty Brothers' organization and experience.

KEEP EVERYBODY HAPPY

Best of all, because Crotty Brothers, Inc. is a large organization with many contacts and facilities, it can

constantly feed in new ideas on food as well as food management. Dishes that have proved popular elsewhere are used to "spice up" menus that might suffer from monotony. Students note the difference. Their satisfaction, coupled with the satisfaction of administrators, lies back of the Crotty Brothers' aim: to keep *everybody* happy.

WRITE FOR DETAILS

If you have not already received detailed information on the Crotty Brothers' food service management, may we suggest you drop us a line direct and we will be glad to show you how you can get rid of *your* food headache — quickly. Crotty Brothers, Inc., 137 Newbury Street, Boston 16, Massachusetts. Operating in 16 States and 45 Cities.

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UNITED STATES
CAPITOL

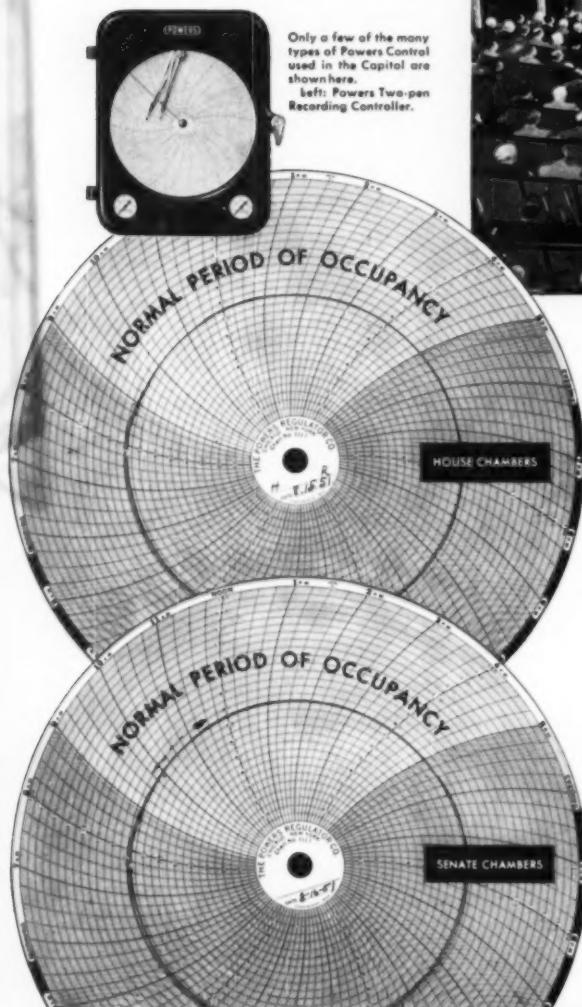
WASHINGTON, D. C.

Right: Joint session of the Congress in the recently remodeled House of Representatives—listening to "State of the Union" address by the President.

In the historic House and Senate Chambers as well as the administrative offices in the Capitol, heating and air conditioning systems are regulated by a Powers system of pneumatic control.

Only a few of the many types of Powers Control used in the Capitol are shown here.

Left: Powers Two-pen Recording Controller.



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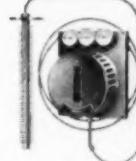


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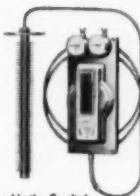
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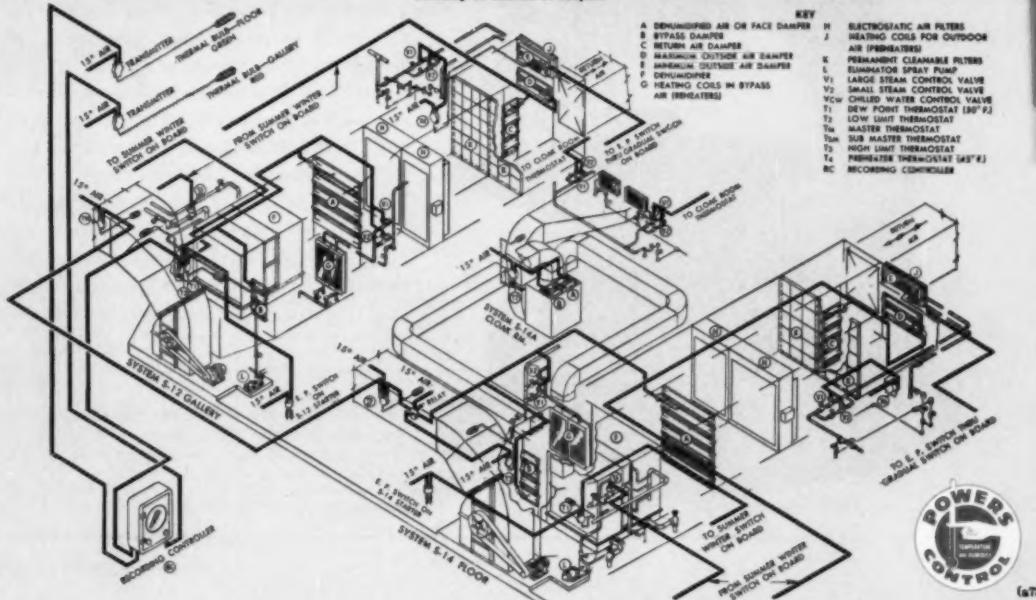


**Powers Room
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Powers Remote Bulb Thermostats for Dew Point, Low and High Limit, Preheater, Master and Sub-Master Control —only a few of the many co-

AIR CONDITIONING APPARATUS DIAGRAM FOR OPERATION AND MAINTENANCE OF SYSTEMS IN THE HOUSE AND SENATE CHAMBERS
Courtesy of Charles S. Leopold



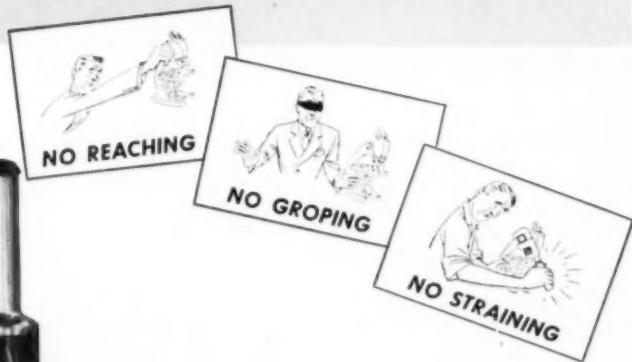


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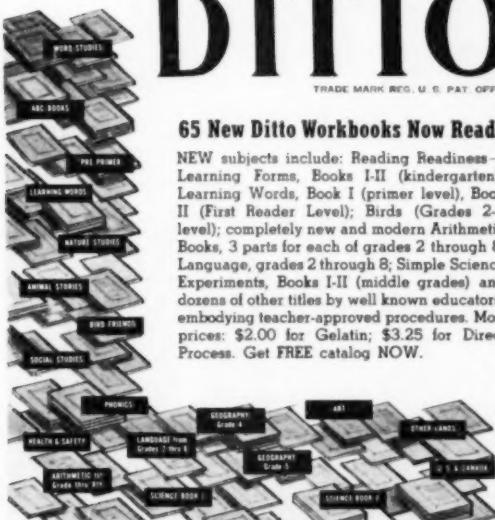
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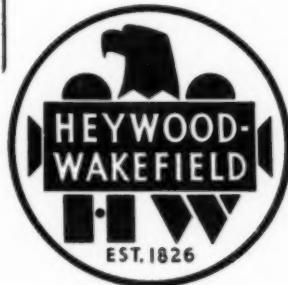


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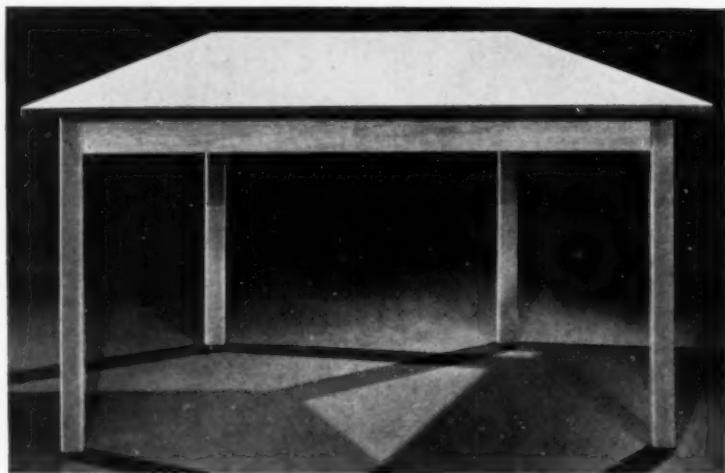


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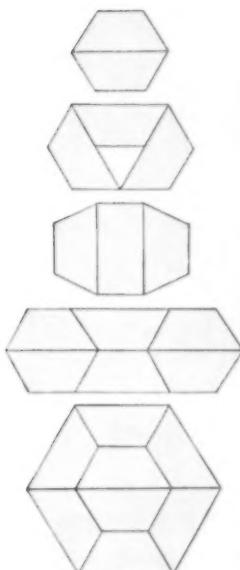
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A CRITICAL LOOK AT COLLEGE ETHICS

ERNEST O. MELBY

Dean, School of Education
New York University



THE VARIOUS DEVELOPMENTS OF RECENT MONTHS in relation to college athletics and cheating in examinations have caused some people to reach the conclusion that there is something fundamentally wrong about the ethical preparation received by our youth in colleges. Many such people are convinced that some drastic action must be taken and no small number advocate a reemphasis on religious instruction as a means of coping with the situation. In viewing this total scene and in planning for the future in education, we shall do well to consider the whole problem carefully and dispassionately and avoid oversimplification in seeking solutions.

We in America place a heavier burden on our educational institutions than seems to be placed upon them in any other country. Somehow we expect that the school and the college will do for our boys and girls and young men and women what we have been unable to do for them in our homes, and what we in the larger community refuse at times even to attempt. My conviction is that there is no real breakdown in ethical outlook in our colleges.

I believe moral and ethical teaching is at least as good and as effective as it has ever been at any time in our history. It is, however, in the larger community that the changes have taken place in the direction of a lessened sense of responsibility and a dulled conscience with regard to sharp practices in business that are near-racket in reality. We seem to have reached the conclusion in many quarters that we can get something for nothing. We are willing to pay huge sums merely for an introduction to the right people. Entertainers in many instances receive compensation all out of proportion to any true worth they may have. Petty graft and personal favors with a price tag

flourish. If we think for a minute that children and young people do not notice these things and if we conclude that they are unaffected by them, we have a very limited understanding of children and young people.

The difficulty is that the college youth is confronted with a sharp difference between the ethical and moral codes taught in his college classes and those he sees in operation, perhaps in his college town, or in his home community. He notices that by and large we have a money standard with regard to success. Men who make money are thought to be successful and those who do not, notably ministers and teachers, are little respected. We must not be surprised if he concludes that the way to be successful is to make money and the way to make money is to know the right people and anything is all right if you can get away with it.

Often the very people who engage in righteous indignation because of the action of the West Point boys in examinations condone ethical and moral practices in the community that set the wrong example for our young people. Most of us who work in colleges and universities know that we could do a better job of ethical and moral teaching than we now do, but unless college and university efforts are met with changes in attitude on the part of the general public with different standards of success and altered sets of values in our broader community life, our efforts within the campus halls will have little effect.

A materialistic outlook on life has a corrosive effect on our children and college youth as certainly it has upon ourselves. The way to improve the ethical contribution of the college is to raise the ethical standards of the average American community.



Looking Forward

Not Window Dressing, We Hope

THE COMMITTEE OF COLLEGE PRESIDENTS, APPOINTED by the American Council on Education to study inter-collegiate athletics, has recommended policies that ought to go a long way in cleaning up the current mess in college athletic practices. It will be a good sign if the committee can make its proposals stick. It is to be hoped that it represents more than an urge for headlines, as one coach cynically observed.

The unfortunate aspect of the situation is that the college presidents had to be prodded into action by an outraged public opinion before anything was done to correct abuses in intercollegiate athletics. To their credit, however, the college presidents did not indulge in "weasle words" in their statement on athletic policy. For the most part, the policies proposed are forthright and courageous.

Actually, the statement on athletics struck a blow in behalf of their own jobs as college presidents. One of the proposals recommended that "the control of athletics must be held absolutely and completely by those responsible for the operation and administration of each institution." That's where it has belonged all along, and one questions the leadership that permitted the administration of college athletics to be operated independently of the president's office. The significance of the proposals of the college presidents' committee merit review and comment:

1. That all postseason games be abolished. That football games and practice be limited to the period between September 1 and the first Saturday in December.
2. That basketball games and practice be confined to the period between December 1 and March 15.
3. That baseball games and practice be confined to the period between March 1 and commencement.
4. That no freshman be eligible for competition on a varsity team; that transfer students from a junior college put in a year of residence before becoming eligible for varsity competition.
5. That scholarships be strictly on the basis of academic ability and economic need.
6. That no scholarship represent more than educational expense.
7. That the department of athletics be conducted as is any other department, with coaches holding the same status as other faculty members with the same faculty tenure and the same faculty salaries, and that the athletic department be budgeted as is any other department.

The statement on athletic policy is a step in the right direction and is considerably more commendable than the position taken by the National Collegiate Athletic

Association. If the N.C.A.A. had kept its house in order there would have been no occasion for the appointment of a committee of college presidents to pick up the litter. The anguished cries of N.C.A.A. fall on rather deaf ears.

The problem of enforcement will not be easy. Perhaps a big stick in the hands of accrediting associations will be the only action that will command respect and compliance.

Why U.M.T.?

THERE'S A GREAT DEAL OF AGITATION THESE DAYS regarding U.M.T. Where's the fire, and who is back of it?

The Department of Defense is reported to favor U.M.T. but admits it is not now properly equipped to staff the program with competent officers. Under Selective Service the military authorities, operating through local civilian draft boards, have all the power necessary to procure ample military manpower.

The proposal by Rep. Carl Vinson, chairman of the House armed services committee, that a group of 60,000 youths between 17 and 19 years of age be permitted to volunteer for six months' training . . . and 18 months as active reservists . . . seems to be inconsistent with originally stated objectives of U.M.T.—the military training of *all* young men in the interest of developing a vast reservoir of military manpower.

The Association of American Colleges in annual convention recently adopted a resolution denouncing U.M.T. as "fantastically expensive, educationally undesirable, morally hazardous, and politically dangerous."

There might be more enthusiasm for U.M.T. if the public were convinced it was the proper solution. Similar programs in foreign countries have been anything but successful, and yet our Congress appears willing to respond to Pentagon and veterans' lobby pressure and place all young men in a military strait jacket for a potential obligated period of eight years.

The original proposal last October by the National Security Training Commission provided for perhaps 25 full-time civilian inspectors to observe the U.M.T. program, to report how the policies of the commission were being carried out at local level, to provide an avenue for a trainee to submit complaints, and to discover malpractice in the camps. How long would such civilian interference be tolerated in a military establishment? No comment.

The military argue for U.M.T. in order to meet military needs for manpower, and yet admit being unable to handle more than a pilot group at the present time. Is it manpower they want now, or the power to be total boss of the man?



DEDUCTIBLE FIRE INSURANCE, *when and why?*

LAWRENCE S. MYERS

Marsh and McLennan, Inc.
Chicago

WHY HAS THE SUBJECT OF DEDUCTIBLE fire insurance suddenly become an issue in the minds of insurance buyers? Perhaps in some cases it is on account of the huge values that are exposed to loss as a result of the tremendous appreciation that has taken place during the past decade and the pressing need to find ways and means of reducing the cost of the insurance. Another factor is the tendency on the part of the larger corporations to look upon small fire losses as operational losses.

On the other hand, a strong psychological reason is apparent. With the advent of the new regulatory legislation that necessitates the filing and approval of all rates and forms, the market for deductible fire insurance

became almost nonexistent and it is human nature to seek that which is denied. This explains, in some measure at least, the demand for an approved plan that can be written legitimately in the several states; it is not surprising, therefore, that two insurance companies proceeded to file deductible plans and that certain other companies subsequently became sufficiently interested to participate either directly or as reinsurers.

Before discussing the two filed plans in detail, it is important to understand the distinction between a deductible and an excess fire policy. At least there formerly was a sharp distinction, although now the line of demarcation is somewhat vague and the two terms sometimes are used interchangeably. Originally, we thought of a deductible

policy as one written on a normal basis such as, for instance, with an 80 or 90 per cent coinsurance clause but with an endorsement attached providing for a nominal deduction from the amount of each loss. This deduction might be as little as \$100, and it was rarely more than \$5000. The chief purpose of the deductible policy was to exclude the small or so-called nuisance claims from coverage. In some cases the deductible policy applied separately to each building, which meant that if a fire involved two or more buildings there was a deduction for each. In other cases the deductible policy applied to any one loss so that the deduction was the same whether the fire destroyed one or more than one building.

On the other hand, a true excess policy is written for a flat amount without coinsurance to cover loss in excess of a specified amount. For in-

From an address before the Eastern Association of College and University Business Officers, Atlantic City, N.J., December 1951.

stance, the value of the property may be \$10,000,000 or more, but the amount of insurance need bear no relation to this value except that it should be ample to cover the largest loss that could reasonably be expected in a single disaster. Insurance of, say, \$1,000,000 might be purchased to apply in excess of a specified amount and this amount, which might range anywhere from \$5000 to \$1,000,000 or more, is called the assured's retention. If a loss exceeds the assured's retention, whether involving one or more than one building, the policy covers such excess loss up to but not exceeding the amount of insurance.

Let us assume that the assured has a policy of \$1,000,000 covering in excess of \$25,000 in any one loss and that a loss of \$75,000 occurs. The assured stands the first \$25,000 and the insurance company pays the next \$50,000. This is true excess insurance and is sometimes referred to as a catastrophe coverage policy.

FEDERAL COMPANY PLAN

The Federal Insurance Company of New Jersey was the first company to obtain approval of a deductible fire insurance plan. This is a straight deductible plan, embracing fire, extended coverage, malicious mischief, and sprinkler leakage, and is intended to provide a method whereby property

owners now self-insuring or desiring to self-insure for a limited amount may legally purchase insurance on the remaining value. The insurance is written on a normal basis with the 80, 90 or 100 per cent coinsurance clause, but with an endorsement attached providing for a deduction of a specified sum from each loss. The deduction ranges from \$5000 to \$250,000, which is a much higher level than was customary under the unapproved deductible plans in past years.

The rate reduction for the application of the deductible plan depends upon two factors: (1) the amount of the deductible insurance and (2) the ratio of the deductible insurance to the total amount required to comply with the coinsurance clause. If, for example, the deductible insurance is \$25,000 and the total amount of insurance required is \$1,000,000, the rate credit is 25 per cent. Ordinarily, the deductible plan applies separately to each item and so if there are two buildings and the fire destroys both, the deduction, whatever it may be, applies separately to each and also to the contents of each—unless the con-

Before a disaster occurs the premium for adequate insurance protection may seem excessive, but after the loss that same premium becomes trivial.



tents are covered by blanket protection with the respective buildings. However, the policy can be written on an over-all blanket basis so that in case of loss, whether involving one or more buildings, there will be just one deduction; but credit in the rate for the deductible insurance is then materially less.

To date the Federal Insurance Company plan has been approved in more than 30 states.

NORTH AMERICA PLAN

The second plan has been sponsored by the Insurance Company of North America and is designed primarily to afford self-insurers a market for catastrophe coverage. Other companies have joined with the North America in order to provide the capacity to write some of the larger lines. This plan contemplates a minimum retention on the part of the assured of \$100,000.

The much publicized Standard Oil Company of Indiana policy was handled by the North America and was written on a deductible basis. The amount of insurance is \$525,000,000, fire and extended coverage, without coinsurance, and the deductible insurance is \$500,000. There is only one deduction in each loss, that is, a fire might involve two or more buildings or might wipe out an entire plant but the total deduction would be only \$500,000. There are some 50 insurance companies on the line, including two or three mutual companies. The rate reduction allowed for the deductible insurance of \$500,000 is approximately 25 per cent.

The Standard of California policy, also handled by the North America, is written on an excess plan with insurance of \$100,000,000 fire and extended coverage, without coinsurance, and applies in excess of \$1,000,000 in any one loss. Here again it would not matter whether a loss involved one or more buildings, there would be only one deduction, namely, \$1,000,000.

One of the interesting features of the North America plan is that perils other than fire, extended coverage, malicious mischief and sprinkler leakage can be included if desired. For instance, earthquake, flood and collapse can be added. Perhaps an all-risk policy will soon be available.

The North America places a great deal of importance on an adequate inspection program. Consequently, when it writes an excess or a deductible poli-

icy it requires regular inspections by competent fire protection and prevention engineers.

PROFIT MAKING ENTERPRISES

We are interested in knowing whether these plans are applicable to college and university properties. First, for the sake of contrast, it might be of interest briefly to mention some of the factors that have been discussed in the consideration of deductible or excess coverage by profit making enterprises:

1. If a destroyed building is *not* insured, the loss sustained is a proper deduction in the income tax return, but the amount of the deduction is limited to the residual book value, which may be considerably less than the insurable value.

2. If an *insured* building is destroyed by fire there is no tax on the excess of the insurable value over the book value, provided the proceeds of the insurance are put back into equal facilities.

3. The insurance premium is, of course, a deductible expense and particularly when a corporation is in the excess profit bracket a large part of the premium comes out of the tax.

4. In some cases, full insurance costs less than the cost of catastrophe insurance plus the uninsured losses.

We must also bear in mind that a manufacturing plant, for instance, is peculiarly susceptible to numerous small losses and that this is recognized in making the rates for full coverage. Furthermore, the entire portion of the premium that the assured retains in return for assuming the small losses is available for paying such losses, whereas an insurance company must use a portion of the premiums for expenses.

COLLEGE PROPERTIES

In eleemosynary institutions there is no federal income tax and the situation, therefore, as respects loss by fire and other casualties is vastly different. Specifically, in the case of colleges and universities the principal income is from tuitions and endowments. Gifts of money have been converted into buildings, equipment and other property, and during the last 10 years the value of these facilities in terms of our present dollar has increased two-fold or threefold.

It is incumbent upon the business managers to protect the endowments by carrying adequate insurance so that



Effects of fire on fire-resistant construction.

in case of loss the investment in the destroyed property will be returned to capital, thus avoiding a serious depletion of resources. Before a disaster occurs the premium for adequate insurance protection may seem excessive, but after the loss the premium becomes trivial and the amount of coverage under the policy looms into prominence.

However, this does not mean that we cannot safely, and perhaps profitably, assume a part of the risk under certain favorable conditions. What are these conditions? This question can best be answered by a concrete example: Take a college with 20 or 25 buildings, well spaced so that a fire is not likely to spread from one to another, of a type of construction that will resist loss by windstorm as well as fire, and under good public fire protection. If these conditions prevail it would not be unwise to insure each building and its contents under the Federal Insurance Company plan, subject to a deductible provision of \$5000 to \$25,000, depending upon the resources of the college. If the total three-year premium without a deductible clause but with the 80 per cent coinsurance clause amounts to, say, \$50,000, the reduction for the application of a \$10,000 deductible clause separately to each building and its contents would probably be in the neighborhood of \$15,000. The occupancy hazards are not severe, except possibly in certain laboratories, and if the main-

tenance is good small losses should be few. If a large loss did not occur and if the small losses in the aggregate were less than \$15,000, the three-year savings would be the difference between \$15,000 and the small losses.

If, on the other hand, a fire destroyed an entire building, there would be a deduction of \$10,000, thus wiping out two-thirds of the premium reduction; whereas, small losses in other buildings during the term of the policy might conceivably use up the remaining \$5000, or even exceed \$5000, and thus result in a deficit. Nevertheless, over a period of 10 or 20 years this plan should bring about a savings.

If the school is somewhat larger than the one just described and is prepared to assume as much as \$100,000 in each loss, the North America plan should work out more advantageously. In this connection, it will be of interest to know something of the insurance written by the North America and seven other companies for the University of Chicago. This insurance covers a group of 35 buildings, all of fire-resistant construction. Until last year, these buildings, together with their contents, were self-insured. Over the period of 20 preceding years, the fire losses on this property were trivial and the largest single loss was \$2000. Based on the loss frequency and severity, together with the excellent type of construction, the nonhazardous nature of the occupancy, the high standard of maintenance and the good

public fire protection, the North America along with the other seven companies wrote \$5,000,000 insurance in excess of \$100,000 in any one loss and charged a premium equal to 30 per cent of the normal premium. This was the first catastrophe policy written under the North America plan.

Thus we have two extremes—on the one hand, a discount of 70 per cent for a retention of \$100,000 on fire-resistant university buildings and their contents; on the other hand, a discount of only 25 per cent for a retention of \$500,000 on petroleum refinery properties, which latter are acknowledged to constitute one of the more hazardous industrial operations.

REPLACEMENT VALUE

There are other important factors to consider. If our institution's fire insurance is on a sound value basis (and it probably is) we already are assuming a large part of the risk ourselves. This is the customary basis and if a building is destroyed by fire, no matter how much insurance is in force, we shall not collect the replacement cost. There will be a deduction for depreciation that will be computed according to the age of the building at the time of the loss and its expected life, with perhaps a penalty or credit depending upon the character of the maintenance that the building received prior to the loss.

As a matter of fact, the chances are that we carry insurance of only about 80 per cent of the sound value, which means that in case of a total loss on a building the proceeds of the insurance might not equal much more than one-half of the replacement cost. This situation could result in great hardship if we are pressed for funds. For instance, if the replacement cost of a building 30 years old is \$100,000, the insurable value after the deduction for accrued depreciation is approximately \$70,000. If, then, we carry insurance of only 80 per cent to value, or \$56,000, and the building is completely destroyed, we shall be faced with a deficit of \$44,000 to replace the structure. Even if we carry insurance of 100 per cent to value there will be a deficit of \$30,000. If, in addition, we have a deductible policy, the deficit will be increased by the amount of the deductible insurance.

We should not dismiss the question of depreciation without noting that here again there is a wide difference between an eleemosynary institution

and a profit making corporation. In the latter case, depreciation for wear and tear is a proper charge against the cost of manufacture or the cost of doing business, thus making it possible to return the original investment to capital as the attrition takes place. And it is significant that, notwithstanding the accumulated reserve for depreciation and the existence of a substantial surplus, some profit making corporations carry their insurance on buildings and equipment on a replacement cost basis.

Why do they do this? The answer is simple. Depreciation for accounting and income tax purposes (but not for insurance purposes) is based on original cost, that is, the original investment. Consequently, when by reason of a fire or other disaster, an involuntary conversion takes place, the tremendous appreciation that has occurred during the last decade renders the depreciation reserve entirely inadequate to cover the difference between the sound value and the replacement cost.

The purpose of emphasizing these factors in a discussion on deductible insurance is to caution institutions against assuming, unwittingly, too much of the risk. If a disaster strikes and the proceeds of the insurance are sufficient to cover only about half of the replacement cost of a structure, a college might be faced with the task of appealing to unsympathetic alumni to make up the difference.

Insurance of 80 per cent of the sound value, provided the value is computed at present-day prices, may be sufficient on buildings of fire-resistant construction, but it is wholly inadequate on buildings of inferior construction. All buildings other than those of fire-resistant construction should be insured on a replacement cost basis and insurance of 100 per cent of the replacement cost should be carried, with or without a deductible clause.

The replacement basis of insuring buildings is an innovation of the last five years and is now available in most states. This basis, however, is applicable to buildings only, not to the furniture, fixtures and other personal property. However, libraries and works of art can and should be insured separately under a valued policy.

SUMMARY

As a summary of the foregoing comments there are three principal

programs from which to choose in arranging fire insurance (and, incidentally, the extended coverage endorsement should be attached to every fire policy so that one will have protection against loss caused by gas or chemical explosions, windstorm and crash of aircraft, as well as by fire). The three programs may be described briefly as follows:

1. A sound value basis with insurance of 80, 90 or 100 per cent to value and without a deductible clause.

2. Replacement value basis on buildings and sound value basis on contents with insurance in each case of 100 per cent to value and without a deductible clause.

3. Sound or replacement value basis with a deductible clause.

No single plan is suitable uniformly. A college should consult its agent or broker in making up its insurance program.

PLAN RECOMMENDED

My own recommendation is that institutions adopt a combination of these three plans; that buildings of fire-resistant construction, if under good public fire protection, be insured on a sound value basis with insurance of at least 80 per cent to value; that buildings of inferior construction be insured on a replacement value basis with insurance of 100 per cent to value; that insurance on furniture, fixtures and other personal property (except libraries and works of art) be insured on a sound value basis with insurance of from 80 to 100 per cent to value, and that libraries and works of art be insured separately under all risk policies on an agreed value basis.

Then, assuming that the physical conditions are favorable, if we wish to participate first in each loss and, in return, obtain an appropriate premium reduction, we can do so by applying a deductible rider of \$10,000 to \$100,000, depending upon the resources of the college or university, and past experience as respects the frequency and severity of losses. But we should not forget that if our retention and the amount of excess insurance are not sufficient to cover the replacement value of the destroyed property, we shall be called upon to participate again in order to make up any deficit. Hence, with a deductible plan we participate first, the insurance company second, and then, if the proceeds still are insufficient, we participate for the second time.

Planning Board (right) projects schedules of college events for a whole year in advance. It is only one device used by Pace College for improving staff relations.



Experiments in

STAFF COMMUNICATION

COMMUNICATION ARTS AND SKILLS programs are rapidly gaining recognition in many colleges and universities. As Earl J. McGrath, U.S. commissioner of education, says in his preface to "Communication in General Education": "American educators have had an increasing awareness in recent years of the importance of educating all citizens in the arts of communication." At least one university has recently approved the establishment of a school of communication.

As a college administrator you may ponder over these developments, especially if you have just sent out a directive to all staff members only to have it largely ignored by everyone concerned. Can you actually apply some of the new theories, technics and methods of communication to the conduct of your everyday administrative affairs?

From where you sit, you may decide that it's hopeless to get people to observe, read, write, speak and listen

The publications office at Pace College will be glad to send a mimeographed bibliography of selected key references on communication. Also available are copies of *Strictly Confidential*, which often carries brief articles dealing with some aspect of college staff communication, and is itself an example of successful staff communication in action.

more effectively. If so, you might stop sitting and take a walk across the way to your department of English, where you usually find the communication skills specialists. If you don't mind asking questions, you may learn a great deal.

It is not mere chance that a recently inaugurated series of staff conferences at Pace College utilized such classroom technics as panel discussions, group discussions, and "buzz sessions," and employed such audio-visual materials as sound films, handmade lantern slides, photographs, exhibits and recordings. Nor is it remarkable that the Pace newsletter, *Strictly Confidential*, published daily for the entire staff and faculty, is thought of by the editor as a medium of communication.

Even the large section of painted wallboard, covering part of a corridor and known as the Planning Board, is an experiment in staff communication. Using space, color and verbal symbols, it projects the complicated schedule of college events a whole year in advance.

Six staff conferences are planned at Pace during the school year. Each meeting is an hour and a half long. Since they are to leave their posts during working hours, the staff members

JOHN WALDMAN

Director of Publications
Pace College, New York

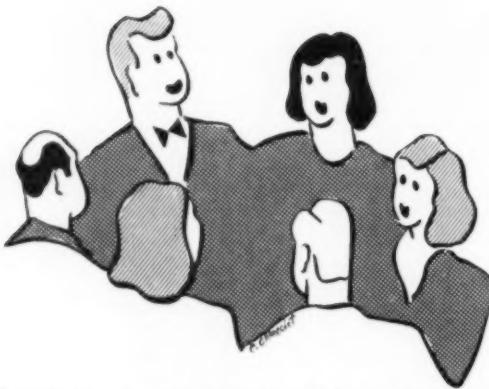
are arbitrarily placed in Group A or Group B, so that administrative functions of the college will not be disrupted. Thus, each session is repeated.

Communication research is scarcely necessary in order to learn why conferences should not be arranged at the end of the working day. Resentment, not to mention fatigue, is not conducive to a two-way exchange of ideas. Communication research has established, however, that most people read, write, speak, observe and listen better in an informal situation.

At Pace, everyone attending the sessions sits at conference tables. Flowers, handy ashtrays, and occasional soft music help to set a mood of relaxed informality. Most of the discussion leaders remain seated while they speak.

Any one of various group discussion technics may be used, one of the most successful being the "buzz session."

Staff members arrange themselves in groups of six or seven to talk over for six or seven minutes a problem that has been presented by the conference leader. The groups also appoint a spokesman to report the results of



Staff members in groups of six or seven talk over for six or seven minutes a problem that has been presented by the conference leader.

their brief session. In this way virtually everyone, even if the room holds 50 or so people, gets an opportunity to voice an opinion. Although the total impression may be one of verbal chaos, actually it is a prime example of democratic expression. Everyone talks. And more important, almost everyone listens.

Another highly effective method for presenting information to staff members is through the "sociodrama." In this instance common problems in staff-faculty or staff-student relationships are acted out by members of the group, with or without previous rehearsal. Example situations might be telephone courtesy (or the lack of it), the airing of a grievance with a department head, or handling new students during crowded registration times. The sociodrama is an excellent way of providing experiences to improve the way one human being deals with another human being.

At least one conference meeting is devoted to the business management of the college. Thoroughly and accurately, someone in a position of responsibility covers the entire field of college finance: tuition, fees, texts and supplies, deferments, purchasing, pensions, insurance, hospitalization, social security, vacations, salary schedules, and the like. A plea for questions is usually unnecessary, they come in rapid-fire succession, especially when such topics as social security are under discussion.

Admissions, guidance and placement departments all contribute toward giving staff members a more comprehensive picture of the workings of the administrative offices at the college.

Public relations is another important topic that should be covered thoroughly at staff conferences. At a recent series of meetings at Pace, the publications office prepared a set of standard $3\frac{1}{2}$ by 4 inch glass slides in color to illustrate a talk on the college's many "outside" publics. A motion picture on telephone courtesy, supplied by the New York Telephone Company, was shown. Examples of all material published during the past year were exhibited. Small groups then met to consider proposals for improving public relations, both inside and outside the college walls.

As a direct result of one of the proposals, copies of all new public relations and publicity printed material are now distributed to staff members by way of the daily newsletter. This is simply another way of keeping everyone informed, of increasing the effectiveness of staff communication. For example, among material placed in the hands of all members were copies of an advertisement which was currently appearing in the metropolitan newspapers, a copy of a letter from the president to the alumni, and a publicity folder announcing the acquisition of a 16 story building to be

occupied by the college following extensive alterations.

The newsletter itself is a mimeographed sheet usually running to four pages and is distributed daily to all staff and faculty members. A single issue may contain official staff-faculty bulletins or directives, a calendar of events, departmental notices, a thumbnail sketch of a staff member, a chatty column of names and news. Contributions from the staff are encouraged; by-lines are used.

Although the newsletter is perhaps the most ambitious medium of communication used by the college, the 20 foot long, 3 foot wide piece of tempered composition board, known as the Planning Board, is certainly the most spectacular. Divided into the 12 months of the year, with subdivisions of weeks and days, the board presents a visual representation of everything that is to take place for the coming 365 days, from registration, through examination periods and class proms, to graduation exercises and back to registration again. As each event is scheduled, the department in the college responsible for the planning sees that the information is pasted up in the proper place.

Color symbols are used for "classes in session" (red), "college holiday" (blue), "examinations" (green), and so forth.

Still in the experimental stage, the Planning Board is not yet an unqualified success. That is, staff members have not yet acquired the habit of regularly checking the board so that they will be informed about the total picture of planned events. Nevertheless, no one in the college would think of scheduling even a minor event without first clearing it with the Planning Board.

In addition to Commissioner McGrath's "Communication in General Education" mentioned in the first paragraph, a collection of lectures entitled "The Communication of Ideas," edited by Lyman Bryson, also is recommended.



AUDITS, AS THEY AFFECT COLLEGES and universities, may be divided broadly into two groups: the balance sheet audit and the detailed or cash audit.

The balance sheet audit is one that has developed almost exclusively in the United States, and until recent years was virtually unknown in England. Even now, in important audits, a great deal more checking is done in the English audit than is done in the United States audit. This is not meant as a reflection on American methods but results largely because of the size of business units in the United States and the existence of elaborate internal organization in many companies. The more nearly complete the internal organization the greater are the protections against possible fraud and inaccuracy, and therefore the need for detailed audits by independent accountants becomes proportionately less. However, this does not remove altogether the desirability of periodic examinations by an outside firm of accountants.

The balance sheet audit has been largely what the leading accounting firms have made it. There had been so much doubt on the part of prominent accountants as to just what the responsibilities of an auditor are when undertaking a balance sheet audit that the question was largely determined by the Federal Reserve Board in its bulletin entitled "Approved Methods for the Preparation of Balance Sheet Statements." The American Institute of Accountants, through the approval by its council of this bulletin, has in effect taken the position that every accountant is in duty bound to make his audit equal in standard to that laid down by the Federal Reserve Board.

In the words of the bulletin: "The scope of a balance sheet audit comprises a verification of the assets and liabilities, a general examination of the related profit and loss account for the period ending at the date of the balance sheet, and, incidental thereto, an examination of the essential features of the accounting."

It should be clearly understood that the ordinary procedure of a balance sheet audit is adequate only when the auditor can satisfy himself as to the sufficiency of the system of internal check.

The detailed audit is not often undertaken, as it embraces a complete

From a paper presented at the Central Association of College and University Business Officers, 1951.

Acceptable practices in

COLLEGE AUDITING

check of all cash transactions during the period under review. All cash receipts are accounted for and all cash disbursements are vouchered. The journal entries are carefully scrutinized and the postings and footings are ascertained to have been made accurately and correctly. The detailed audit is used, ordinarily, when embezzlement is either to be detected or guarded against, when pay-roll and other disbursements are to be verified in detail, or when a system of internal check does not provide reasonable assurance

of decentralization is unavoidable, and some auxiliary enterprises, such as the athletic association, book store, dining halls, cafeterias and the university press, often serve as collection agencies for the business office and maintain some separate accounting records. The ultimate responsibility, however, must rest with the business office.

The separation of functions—purchasing, accounting, disbursing and auditing—is the key to adequate internal control. Responsibilities and duties of employees must be clearly defined, and the work should be subdivided so that one person does not have complete control over a transaction. For example, as Lloyd Morey expresses it in "University and College Accounting": "No one officer or his representative should buy the goods, check their receipt, approve the bill, and pay the bill. . . . The business office should have within itself the means of internal audit to ensure that every transaction is a valid one, by having it authenticated by two or more responsible members of the staff."

It should be emphasized that internal audit is an integral part of a complete internal control system and comprises a planned check on the work of other employees. It should cover an examination of and control over cash receipts, cash disbursements, and inventories, and should include a careful investigation into the records of the outside departments serving as collection agencies.

The internal auditor should be as independent as possible of other business officers and be directly responsible to the chief business officer. In smaller colleges that cannot utilize the services of a full-time internal auditor, the internal audit is of such importance that periodic checks on the work of other employees and decentralized departments should be made by some member of the staff.

Balance sheet audit adequate only under tight internal control

G. EDWARD HARWOOD

Controller, University of Notre Dame

that the detail work in the cashiers' and accounting departments is carried out correctly.

All of this leads to the importance of well organized internal control.

Internal control has been defined as the system of procedures, methods and records through which the work of employees is continuously checked and verified by the work of other employees, without duplication of effort and in the normal flow of operations. It should be emphasized that internal control is designated not only to prevent defalcations but, equally important, to discover and eliminate errors.

The business office should be completely responsible for all business transactions, particularly the control of cash and checking, or auditing, the cashiers' records. A certain amount

SAVE THOSE ELMS

Dutch elm disease can be controlled

RESEARCH AND EXPERIENCE IN CONNECTICUT prove that the deadly Dutch elm disease may be fought successfully. By telling the Connecticut story more effective control methods and further research in disease preventive measures may be encouraged in all elm growing states.

The earlier failure of the government to eradicate or to prevent wide spread of the Dutch elm disease in this area through using the only methods known at that time made it evident that research work should continue. The Connecticut Agricultural Experiment Station in New Haven, one of the few stations that started and still continues to carry on an aggressive research program, was so encouraged by results that it is now experimenting with another possible disease control measure.

Tree wardens of Greenwich, Stratford and Madison, Conn., have carried on effective programs to protect public

elm trees, gradually reducing tree losses to a minimum. In Greenwich and later in Stratford reports indicate that now losses have been reduced to less than 1 per cent. Greenwich, probably the town in the state longest exposed to Dutch elm disease, still has about 6000 public elms along its 200 miles of streets and roads and in its parks.

Most readers are fully aware of the tremendous loss to school, college or university with an elm lined campus if the trees die. The character of many a campus would be changed with their extinction or near extinction. Also, serious diseases and insects threaten other tree species and the neglect of

the elms and the planting of certain other trees to replace them may prove to be a near-sighted policy.

This leads to the question: "What can be done about the Dutch elm disease?"

First, it must be understood that the disease is caused by a fungus and is a plant, not an insect disease. The growth of this fungus in the water conducting parts of the elm results in stoppage of these water vessels. The disease fungus is carried most commonly from tree to tree by elm bark beetles, although sometimes it passes from one tree to a near-by elm through root grafts beneath the soil. There is still no sure way of preventing a tree



DYING ELMS



DEHORNED ELMS

from becoming diseased or of curing a sick tree. Thus, in discussing tree protection work reference is made to preventive measures that, when combined in an effective control program, have reduced tree losses greatly.

The bark beetles bore into the bark of newly dead or dying trees or limbs and lay their eggs, which soon hatch. The larvae feed on the bark while growing, then pupate and emerge in the spring. They go to near-by healthy trees to feed in the crotches of the branchlets, burrowing into the live tissue. After feeding they seek out new dead and dying wood in which to lay eggs for a summer brood, thus completing the cycle. When emerging from the bark of diseased trees the beetles bring with them on their bodies the spores of the Dutch elm disease and, in feeding, infect the healthy trees.

The function of the DDT spray is to kill the beetles before they feed. Since the DDT spray usually enters insects through the feet, its effectiveness on these bark beetles is increased by considerable travel over the branchlets before settling down to feed. In order to get full coverage of the feeding areas, a thorough job of spraying must be done.

A 12 per cent DDT spray has been found very effective in killing the beetles; it should be applied just before leafing out. This heavy concentration of DDT stays on the tree for some time. If applied after the elm leafs out, the leaves would act as barriers and prevent complete coverage of the limbs and twigs. Also, such a concentrated spray would burn the leaves.

A foliage spray of 6 per cent DDT concentration is recommended in the late spring or early summer. This spray will kill more bark beetles and will destroy elm leaf beetles and canker worms as well. Sometimes in order to keep a layer of DDT on the tree, which will take care of late bark beetles, a third application is made in midsummer.

The most necessary spray is the 12 per cent DDT pre-foliar spray in the early spring, which has been a big factor in obtaining successful control of the disease in Connecticut. When funds are limited, the 12 per cent DDT pre-foliar spray and the late spring or early summer 6 per cent DDT foliage spray are advised. However, the three spray program gives better protection. Elms grow fast in the earlier part of



Beautiful elm on the grounds of Yale Botanical Gardens.

the year and thus are most susceptible to Dutch elm disease.

Although the beetles feed on healthy elms they tend to seek out dead and dying elm wood to lay their eggs inside the bark, which makes it apparent that the pruning out of deadwood in disease free trees and prompt removal and proper disposal of infected trees are important control measures along with the DDT sprays recommended. Tree trunks, stumps or wood piles, where bark is left on, are also serious infection centers.

The flight of the bark beetle is limited. For this reason 1000 feet is found to be a reasonably safe protection zone. Certain research observations have indicated that the odds are one in a hundred that an elm will become infected beyond 300 feet of the infection center.

Another preventive measure, carried out to combat Dutch elm disease, is in the field of chemotherapy. The Con-

nnecticut Agricultural Experiment Station in New Haven has found that a chemical, Oxyquinoline benzoate, applied to healthy elms, through the soil around the roots, appears to give practical protection in most cases. It has been applied under pressure in mixture with a liquid fertilizer.

Treated healthy trees do not become infected as readily as untreated healthy trees. Trees diseased when treated usually die from Dutch elm disease, although they may die more slowly than untreated trees would. Treating a diseased tree, therefore, is not practical in general, although disease seems to be retarded in some large trees when the chemical is applied annually. The cost of the chemical treatment is the major deterrent in encouraging general use. It is recommended definitely as a high priority treatment for all valuable trees warranting the expense.

The possibility of saving elms newly infected through the pruning out of

diseased branches is slim. Most tree men in Connecticut are of the opinion that the chances for failure far exceed the chances for success. If attempted, at least twice as much healthy wood should be cut off as infected wood.

The last recommendation in the protection of the elm is good tree care. Trees should be watered periodically and fertilized with a complete fertilizer as needed. Locally, there is no research evidence that fertilizer treatment has any bearing on preventing infection. Generally, trees so treated die less rapidly from Dutch elm disease if they contract it. Also, vigorous trees have less deadwood to contend with. All insects and diseases that weaken elms should be combated as such trees often are more susceptible to the disease and attract bark beetles.

TREE LOSSES REDUCED

From results already accomplished in Connecticut, the more disease prevention measures taken, the more tree losses are reduced. Thus, the best informed Connecticut authorities recommend a coordinated program involving DDT sprays, tree sanitation work, chemotherapy where warranted, and good tree care.

In its latest annual report, "Frontiers of Plant Science," the Connecticut Agricultural Experiment Station published an article "New Hope for the Elm" by Dr. Albert E. Diamond, head of the plant pathology department. The last paragraph is quoted to show the light that shines in contrast with all the gloom on this subject:

"Research on controlling Dutch elm disease will continue and, as improved methods of control are found, they will make the present optimistic outlook even better. It is a measure of progress to compare the gloomy outlook of 15 years ago, when little could be done to protect an elm tree, with that of today when a great deal can be done that will assure the continued health of an elm. It was never truer than it is today that the elm is not doomed; in fact, the elm is, through such research as has been done at Connecticut, becoming a better risk as a shade tree than is the oak or the birch."

Anyone desiring to obtain DDT spray formulas and other such data is invited to write to the Connecticut Agricultural Experiment Station, 123 Huntington Street, New Haven 4, Conn., for its special bulletin, revised January 1949, "Combating the Dutch Elm Disease," by A. E. Diamond and G. H. Plumbe.

VOICES OBJECTION

to investing endowment funds in U. S. bonds

HARVEY SHERER

Assistant Business Manager
Oregon State College

I OBJECT TO THE INVESTMENT OF A large portion of endowment funds in government bonds. For a number of years I have been reading of the decreasing return from endowment funds, and I have also watched the concurrent increase in investment in government bonds. I know that such an objection is "unpatriotic." Or at least, it may be so labeled.

Nevertheless, it is an objectionable practice to overinvest in government bonds because the rate of interest is so pitifully low. There is such a thing as being "government bond poor." No college can accumulate enough funds to hope to live on the low interest return on such bonds.

What are the supposed advantages of government bonds? Liquidity? Endowment funds are supposed to be invested to bring income, and a current market should not be the major factor to be considered in investing. Safety? There are commercial enterprises in this country that have paid dividends every year for more than 100 years! That includes depressions, panics and inflations. Diversity? It is not diversity to overload. Patriotism? The support of the government is at present the duty of every citizen, but it is questionable whether the citizen is expected to impoverish himself or his trust to take care of that government! Easy way out? This seems to me to be the key to the overinvestment in government bonds. They are so easy to buy and it gives the responsible officials an easy conscience. No study of dividend records is involved. In fact, no brain at all and very little action are required.

It is a funny thing but people who invest endowment funds in government bonds do not realize that

they can lose heavily in government bonds just as they can in anything else.

But what is most painful is to observe the complacent officials who "believe in government bonds" cash in equities in commercial enterprises, and then refuse to reinvest in commercial enterprises. I have seen custodians of endowment funds even invest a sizable bequest in government bonds. State laws do not compel the trustees to invest in government bonds although some trustees seem to make that an excuse. Actually this argument is a rationalization of the lazy way.

These trustees are utterly ignorant of the painful results of this lack of faith in free enterprise. What happens to the college? Current income from endowment drops to a dribble, and someone must raise elsewhere the funds that should have been available from the endowment funds. The raising of such funds is an expensive and slow process. What happens then is a shift of expense and source of income. By shirking their responsibility to make alert investments, these officials complacently shift their work to others, and the college income goes down, partly because any large gifts obtained are grabbed by these same trustees for the endowment fund!

It is astonishing to find many trustees who make their living in commercial enterprises, who breathe fire when government controls are mentioned, who trumpet their loudest for "free enterprise," immediately lose faith in that system and put all their trust money in that government, and *not* in the system it is supposed to govern. This is certainly something for Jimmy Hatlo! As far as I am concerned, there are only two phrases to fit the situation: "I OBJECT," and "NUTS!"

COLLECTION OF DEFERRED FEES AND student notes is one of the most perplexing problems that the business officer of an educational institution has to face. It is a problem that all colleges share, differing only with regard to the policy of granting deferrals and loans and in their collection.

I have felt for some time that if a student is to get the most out of college he should be able, at the start of a semester, to pay his tuition and fees, his semester's room rent, and at least his first month's board bill. Unless he is able to do this, he has a serious financial problem on his hands and will be handicapped in giving full attention to his studies. One of the most important functions of a college is, presumably, to prepare a student to adjust successfully to his position in life following graduation. Acceptance of financial responsibilities will be a necessary part of this adjustment. We are not doing a student a favor if we allow him to dodge or shirk his financial obligations.

Since the University of Nevada's published catalog states that board, room and fees are to be paid in advance, I, as controller, believe that we should adhere to that policy. There should be no deferrals granted, except to those students who are on scholarships and who have not received their checks, and such deferrals should not be in excess of the scholarship money due. We do not give out scholarship checks unless the obligations owing to the university are paid first.

Nevada's president, who had served at several universities in various administrative capacities and had coped with this problem, agreed wholeheartedly and ruled that no deferrals would be granted except by the controller's office and under the conditions mentioned. A student in need of help from the university should receive this help through a student loan rather than through a deferment.

The University of Nevada, being a state institution, does not have many endowments, but over the last 40 years various donors have given sums of money to the institution to be used for student loans. Some stipulate that only the interest from investment of the principal may be used for loans, while in others the principal may be used. The rates of interest are low, 4 per cent being the highest rate charged, while one loan fund states that no interest shall be charged.

University of Nevada works out plan for

COLLECTING FEES AND LOANS

P. W. HAYDEN

Controller, University of Nevada

Until July 1949 a student who wanted financial help from a loan fund would stop in at the president's office and request a loan from either the president or his secretary. If either of these persons felt that the student was in need of help and worthy of a loan he could be granted a loan for any amount up to \$200 for not more than one year's time. Upon authorization of the president's office, the business office would advance the funds to the student and deposit the note in the vault. Periodical follow-up through interviews, statements and letters collected some of the notes that were not paid promptly when due, but others grew yellow with age.

An analysis of the outstanding loans on July 1, 1949, showed that 70 per cent of the loans were past due, many of them 15 to 25 years past due. The attitude of both the administration and the students seemed to be that the funds had been provided for the purpose of giving financial aid to students and, that purpose having been accomplished, collection was of lesser importance. While some schools, more particularly private schools, resort to collection agencies and in some cases litigation, it has never been the policy of Nevada to do so.

PROCEDURE REVISED

Two years ago the procedure of granting loans was revised. Now a student wishing financial aid from the university first obtains from the president's office an application for a loan fund blank; this form has been designed to acquire as much information concerning the student and his needs as possible. This the student fills out and takes to either the dean of men or women, who then checks on the

information furnished by the student and also checks with the student's instructors to determine whether or not he is making satisfactory progress in his studies. The dean then signifies in writing either his approval or disapproval of the loan.

A further precaution is taken in requiring one of the student's parents or his guardian to sign the loan as guarantor, or in the case of married students a responsible person on the campus or in the community. After all investigation is completed and upon receipt of the questionnaire properly filled in with the signature of the guarantor and the approval of the dean, the president then authorizes the loan. Since the inauguration of this plan we have had many fewer collection problems on the loans granted.

However, we still have the collection problem of our long overdue notes. Since a large number of these notes have been allowed to ride over a long period of time, we realize that regardless of what method we resort to in an attempt to collect on them, the write-offs will be necessarily high. We are considering a plan that was used with a great deal of success by a midwestern institution. This school was in much the same situation that we are now in. It wanted to raise funds for a new building, so it got in touch with the holders of old accounts and asked them for a contribution to the building fund, stressing the fact that the contribution would be considered a donation rather than payment of their note, for the note was being torn up—and the note would be torn up in front of them. The plan paid off handsomely. As to how it may work out here, if we decide to try it, only time will tell.

The philosophy behind

CAMPUS PLANNING

BEFORE WE GO TOO FAR IN A MECHANISTIC way to develop the college campus, we should have a look into the historical development of the university and reestablish in our minds the relationship of the university to mankind.

The original establishment and growth of the universities was a manifestation of the philosophies of life that were current. Today we are charged with the responsibility of an expression of our time. This expression is coming about in those universities that realize that the shaping of space for the teaching process is an important adjunct to education. The campus should be one of the tools of teaching.

FLEXIBILITY IN PLANNING

A college campus can be planned, but we must determine just how much physical detail can be preplanned on paper for future development. To attempt to preconceive the physical plant of the university of the future in all of its details is an impossible task. Recent discoveries in scientific fields confront all of us with new tasks, and the increased possibilities for learning in all fields if adequately shaped space is provided gives great importance to flexibility in planning.

To understand the position of the university physical plant in relation to teaching and research it is necessary first to understand our time and its relationship to history. The last 100 years have brought great changes and the pace of technological development is ever increasing. Our universities are and must be the first to presage this change. Hence, there must be developed the study of, and in many cases a duplication of, the processes by which our civilization is developing.

The development of space for teaching and research for the forementioned

From an address delivered at the national conference of Physical Plant Administrators of American Colleges and Universities.

RICHARD N. KUHLMAN

Professor of Architecture and Planning
University Architect
University of Oklahoma

activities is a trying yet interesting job. Most of us in university planning work are drawn to it because of the challenge it presents, not because it is an easy position in which to be.

It is unfortunate that in the past half-century little attention has been paid to the design of the physical plant in relation to the times. This was the outgrowth of the borrowing from Europe of philosophies of teaching and building.

In its relation to society the university in this country is (or should be) unique. The size of our universities show the growth of education in a democracy of the greatest size ever known. This is an important consideration to plant designers since few tax supported schools can limit enrollment and enrollment rises and falls with the economic and world situation.

DIFFICULT SITUATION

Situations of abruptly rising enrollment are normally accompanied by an inability to build because of the normal lag in appropriations, particularly the inability to justify the construction during periods of normal enrollment. This is a difficult situation, to say the least, and is unique when considered historically. Many of the older universities remained comparatively static in their growth for considerable periods and additions, when made, were comparatively simple when measured by today's conditions. While it is true that some universities have suffered rather intensive building programs from time to time, historically these are comparatively recent, and no problem, up until the last 25 years, has presented as much difficulty as many of our present problems in the provision of space for teaching. I am thinking not especially about the fields of the sciences but also of the arts.

Scientific development has brought with it many fascinating new tools for teaching. Those charged with the planning of teaching space are much aware of the need for additional space and for the reshaping of space. Experimentation in the teaching of subject matter and invoking thought is growing at a rapid pace. Hence, the synthesizing of the technical apparatus with the architecture and with normal engineering requirements becomes a major problem for study. Along with this, practical means must be devised for changing the quantity and quality of space so that reasonably rapid and inexpensive changes may be made as new ideas in teaching are tested.

SHOULD BE SIMPLE AND SIGHTLY

We must be cognizant of the fact that the teaching process has evolved from students listening to master to a system of learning by doing and experiencing. The very nature of the operation calls for different types of space in virtually every field; therefore it is difficult to understand how we can duplicate historical buildings and hope that they will function properly. Structures for teaching must be built to give the greatest flexibility within cost limits and in such manner that the addition of technical developments will be comparatively simple and sightly.

The university campus is in the same position that nearly all cities find themselves. It has inherited a plan that was quite fitting for the days before invention of the automobile. Architecturally speaking, cloistered charm was created, and this probably expressed the feeling of the universities of former times about their relationship to society in general.

In our time the university is manifesting itself as an integral part of society; its work touches more persons than ever before. In many cases its very attitude is one of making itself more and more available to society and the public more and more welcome to its campuses. This calls for a

Cloistered charm must give way to decentralization, costly as that will be

new consideration of the appearance of the university to the public in general.

A great deal of criticism has been heaped upon universities because of their cloistered aspects. Although most of this is unfounded, the work of the universities in leading the development of our civilization could be greatly enhanced by a physical plant that is shaped architecturally to manifest the democratic spirit. Universities using architectural form borrowed from the past are not fulfilling this obligation.

STUDY OLDER CAMPUSES

The architectural expression we ask for in shaping both buildings and campus is not concerned merely with the exterior and interior treatment of the structures themselves but with a reorientation in our thinking about the use of the campus. The return to a more nearly human scale in the campus itself would be beneficial, and certainly a more usable landscape could obtain. It might pay to study the oldest sections of some of our older colleges and universities, for there nature was not much tampered with but rather was aided in producing human surroundings.

Let us go on to some of the more practical aspects surrounding the design of the campus. The traffic problem has penetrated the campus, as has the problem of being able to park vehicles within reasonable walking distance of the teaching facilities.

As a palliative many universities have eliminated student use of automobiles by means of various rules. Even so, a pressing parking situation prevails for the staff. The relief obtained from restrictions on student parking is only temporary. Since our cities are starting to decentralize, the need for accommodations for motor vehicles in the future will be greater. It is disheartening to think of the portion of the university budget that may have to be spent for this adjustment. Universities having large campuses will have to give study to the dispersal of buildings into teaching



interest groups so that walking time can be held to the minimum and so that mechanical means of transportation can be used advantageously between buildings.

Certainly the separation of pedestrian and vehicular traffic must come about or our campuses will become as inefficient and hazardous in their way as our cities are now. Some dispersal or decentralization is already taking place on campuses. Certain fields of research and teaching have been dispersed for some time because of the need for special conditions and situations, and now in the sciences it is possible that more segregation will become necessary.

All of us are conscious of the costs involved in the foregoing considerations. There is a reasonably great investment in present structures and, particularly since most of our universities are designed with a centralization of utilities in mind, it is difficult economically to break away from the present concentrated trend.

Universities cannot be preplanned in all of their details, but they must have continuing plans. We are all familiar with situations in which several physical plans have been proposed and adopted within the last 50 years. In almost every case the press of modern conditions has made it necessary to relegate part or all of the plans to the files for historical reference. A great deal of money has been spent on such operations and, even though I do not doubt the sincerity of the designers and their clients, in many cases the teaching and research processes have been limited because of these preconceptions.

If colleges and universities are to spend their building money wisely

every one of them must have a going campus planning or campus development committee. This committee should consist of several members of the faculty appointed by the administration from a list of suggested appointees made by the general faculty or its representatives. Representation should, of course, be as widespread as possible from the various fields of interest on the campus. Along with these appointed members, ex-officio members should be the director of the physical plant, the university architect or its architectural consultant, and the dean of admissions and records, with the vice president of the university serving as chairman of the committee.

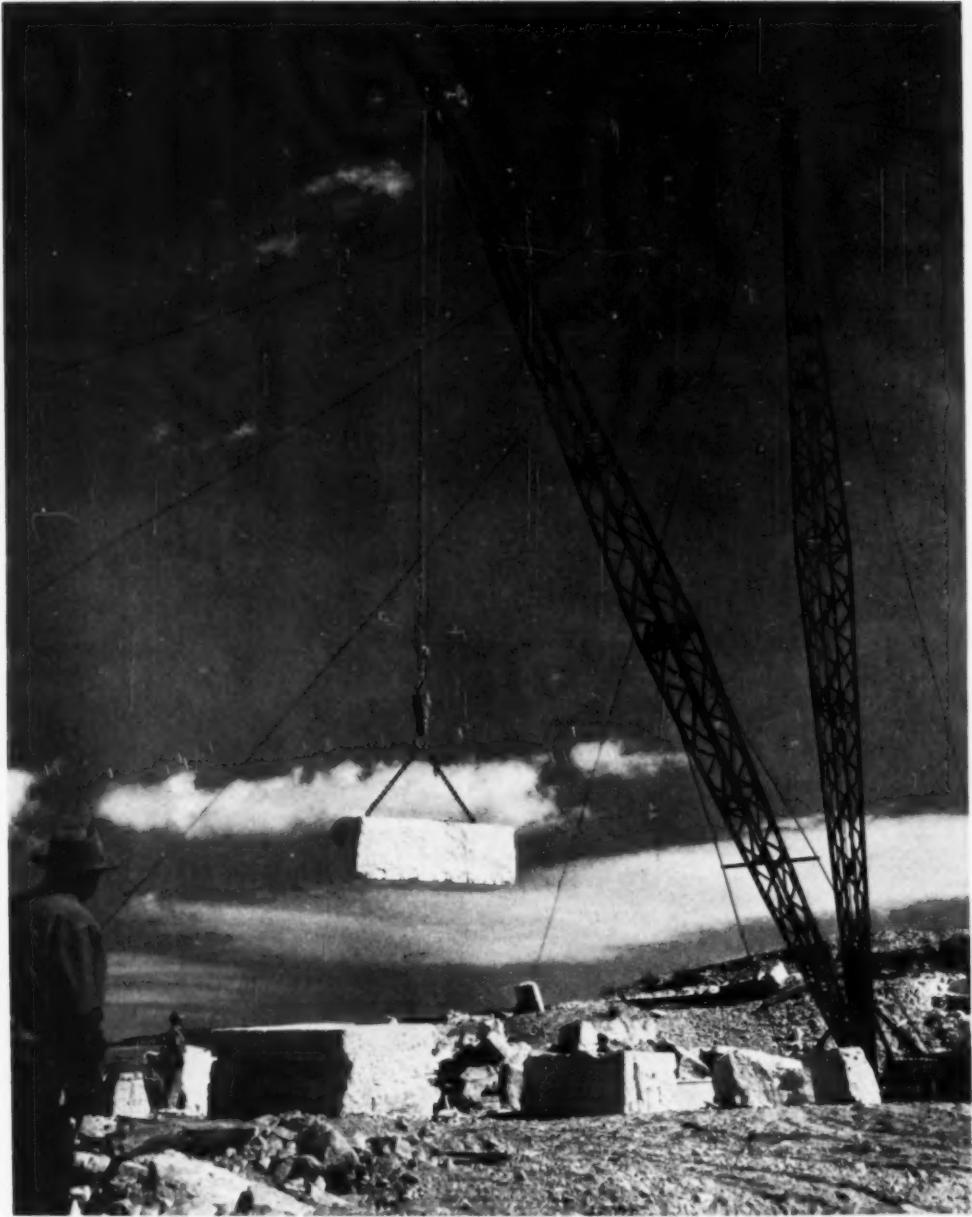
Such a committee should have power of recommendation to the administration on all matters concerning campus planning and the use of present space. It will become cognizant of the university's problems if it is required to meet once a week and discuss with college and departmental administrative personnel all of the detailed problems of the present and the foreseeable future.

ELIMINATE NONESSENTIALS

Through its ex-officio members the committee can obtain and interpret to the faculty a complete picture of the possibilities for the development of the physical plant from the financial, engineering, architectural and enrollment points of view. In turn, faculty representation on the committee will keep it ever aware of the present and possible future needs of the various departments. The committee will be able to demand real justification of space needs and to eliminate expensive nonessentials so that money will be channeled into supporting necessities.

At the University of Oklahoma we have found that in some cases the development of justifications for proposed space has assisted some departments in clarifying their actual needs and operations. We know that possible duplications have been eliminated in some instances and that coordinated use of space to its maximum capabilities is increasing.

I believe that universities built in our time should be built for our time. Every capability of our staffs and representatives of our staffs should be used to look as far into the future as logically possible. Only in this way can we obtain a sufficient background of documented evidence of trends to develop flexible plans.



THE RUGGED WEST IS TYPIFIED BY THIS UNIVERSITY QUARRYING OPERATION

Above: Giant 110 foot derrick at the quarry lifts out a 10 ton block of rock. More than 3000 tons have been stockpiled for future use. Opposite page. Top: Main unit of the university's college of agriculture building

is in the process of being occupied at the present time. The structure is decorated with bas-reliefs. Below: Rough ashlar, applied to the agriculture building, is being checked by a workman to see if stone is level.



UNIVERSITY QUARRY

**furnishes stone for present and
future buildings**

TRUDY DORETY
News Editor
University of Wyoming

THE UNIVERSITY OF WYOMING's quarrying operations are making its campus in Laramie, Wyo., one of the most attractive in the country.

The idea for a quarry originated when the university planned a major building program during the 1920's. A unique blend of sandstone and limestone, showing soft tints of gray, pink, tan and orange, had been found 10 miles north of Laramie. Impressed by its beauty, the university's trustees authorized the establishment of the quarry which has yielded more than 15,000 tons of stone since 1923. The stone has been used on 11 major buildings.

The rugged West is typified by the way in which the stone is placed in a random rough ashlar pattern on all buildings, yet the soft colors harmonize with the design of even the most modern structures.

The newest buildings on the campus are Wyoming Hall, a men's residence hall recently finished; a memorial field house put into use in the fall; an education building just being completed, and a new agriculture building which soon will be occupied.

Wyoming Hall is probably the most modern of the four buildings in design. From the air it resembles a large sans serif T, but to students entering the dormitory it has the appearance of a large, luxurious hotel. A double insulated glass front, 8 feet high and 146 feet long, serves to soften the severe lines of the building and to give it unity with the recently landscaped area in front of the building.

The university's own stone is used in large expanses on the face of the building to provide a decorative effect. An Indiana limestone is used on other sections.

Inside the residence hall is a beautiful lounge, with the insignia of the university's various fraternities inlaid in the asphalt tile floor. The 200 rooms, each accommodating two students, are painted in eight different pastel tints. Steel furniture, in various colors, is used in the rooms and aids in maintaining good sanitation.

The structure, erected at a cost of nearly a million dollars, contains 70,097 square feet of space, or 779,755 cubic feet.

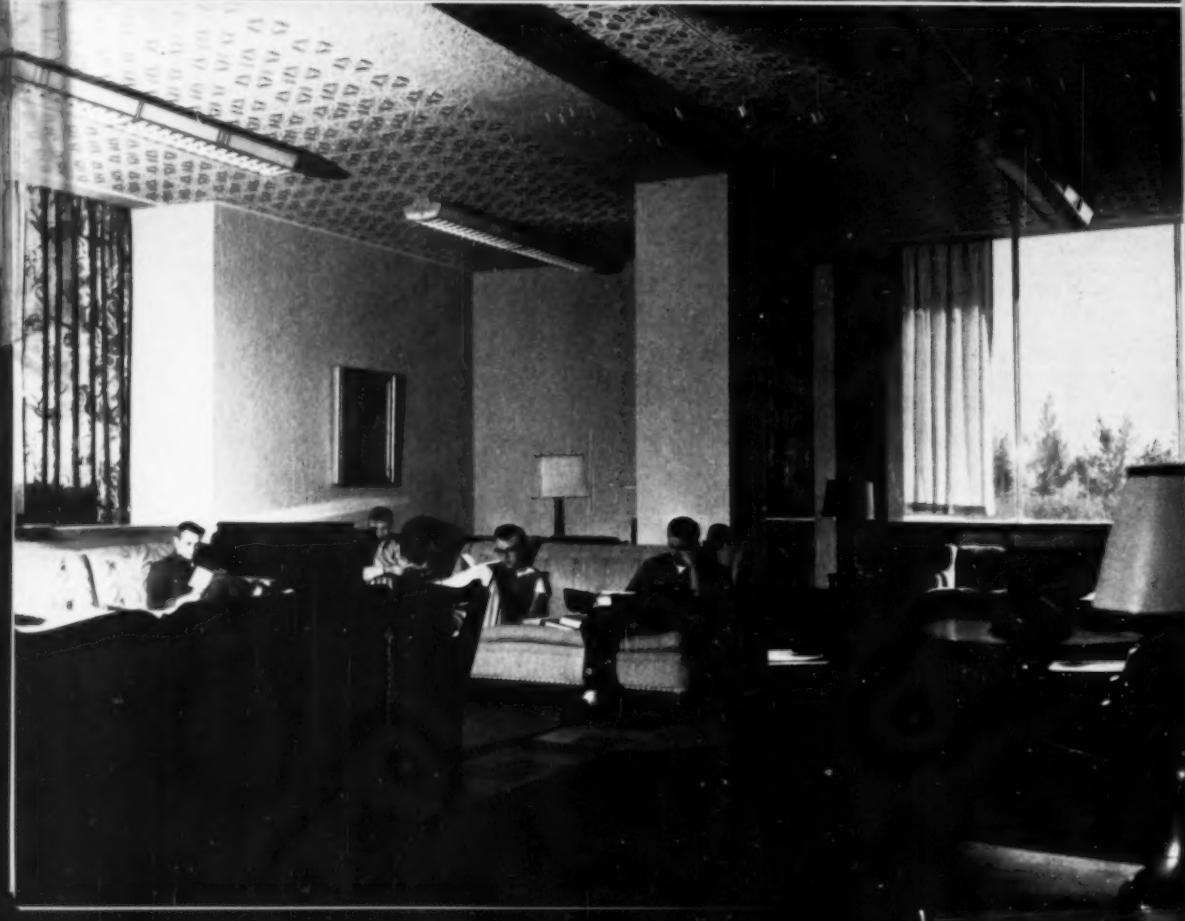
The new memorial field house, lo-

cated four blocks from the east edge of the campus, was built at a cost of approximately \$1,100,000.

The acre and a half edifice includes an inside arena that provides practice space for football workouts and other sports events. The 37,180 square foot area of this inside field is covered with some 130 tons of tanbark. During the basketball season a \$20,000 floor is used in the arena, while 11,000 spectators can be accommodated. Space for 9000 is located on the sides of the removable gymnasium floor, the other on the ends. There are no view obstructions in the arena for the sweep back from the first row in the balcony is constant, with the angle of the rise the same throughout.

The arena, 60 feet from floor to arched roof, is warmed by six distinct types of heating, including radiant heat to keep the cement floors and concrete balcony seating area warm. Ventilation of the new field house is such that a new supply of air is circulated every eight minutes.

In the modern structure, which has 134,476 square feet of floor space, approximately 7000 square feet is



given over to storage space. Also included in the building are locker rooms, laundry, movie projection rooms, training and equipment rooms, two official four-wall handball courts, wrestling and gymnastics rooms, a "W" club room for Wyoming lettermen, and a press lounge. There are six locker rooms—one for faculty members, one for coaches, and four for the home and visiting teams. These locker rooms are 5000 square feet in area, with an additional 1684 square feet of shower rooms and 3140 square feet of office space.

EDUCATION HALL

The new education building, erected at a cost of \$1,360,000, was designed to serve as a large-scale model for high school construction in the state. Most of the classrooms, except the laboratories, are planned so that they can be used for a variety of purposes. The artificial lighting in all classrooms and offices is of the thin line fluorescent egg-crate type. Natural lighting is provided by glass brick in the upper part of the windows, diffusing the light to the ceiling, while below is 30 inch clear glass, which has a visor extending from the building in order to protect the students from direct sunlight. The building faces the south, and all laboratories needing soft light are placed on the north side.

Pastel tinted paints make classrooms pleasant. All chalkboards are green, and yellow chalk is used instead of white. Pupils' and teachers' desks and bookcases are of blond wood to minimize reflections.

The principle of noninterference of activities is provided for in the building by the separation of music, physical activities, assemblies, and other areas that are noisy.

The laboratory schools, the center of every teacher training program, occupy the center position in the building. Around the laboratory schools are arranged the college classrooms and the various clinics and special areas, such as child guidance in special education, art, music and crafts.

The first floor is predominantly elementary education, and contains rooms for the nursery-kindergarten through

sixth grade, headquarters for the elementary department, and a library. Each elementary classroom has an attached workroom, teacher's office, and cloakroom for children's wraps. In some rooms a one-way screen is provided so that practice teachers can observe activities of the class while preparing work for the children. The nursery-kindergarten suite includes a lunchroom and a sleeping room. Playground space for the smaller children is a walled-in enclosure in the rear court of the building.

The second floor contains secondary classrooms for English, social studies, mathematics, languages, commerce, home economics, the library, and headquarters for the secondary education department.

College classrooms of various sizes are located on the third floor, and seat from 20 to 80 students each. There are also offices for the department of educational administration, and a graduate seminar and curriculum laboratory, a conference room for cabinet meetings and graduate examinations.

The ground floor of the classroom section contains clinical rooms and offices for guidance and special class work for atypical children and for health education, a visual-aids room, a rural laboratory classroom, music and chorus room, indoor playroom, a faculty lounge, industrial arts room, and a fine arts room.

MODEL GYMNASIUM

The auditorium and gymnasium form a unit that can be separated from the rest of the building. The little-theater type of auditorium seats 450 people, and has facilities for showing movies and presenting plays, recitals or concerts. Immediately behind the auditorium is a model high school gymnasium, accommodating approximately 650 spectators. It has an 84 by 50 foot pine butts playing floor, which is used for basketball, volleyball, badminton and shuffleboard. Glazed tile is used on the lower fourth of the walls, and glazed brick on the upper three-fourths. Dressing rooms adjoin the gymnasium.

The building is equipped with a complete public address system that reaches all classrooms, the auditorium, and the gymnasium. The public address system is used to handle the classroom bell system and fire alarm system.

The agricultural building, constructed at a cost of \$1,678,000, houses

the agriculture college offices and classrooms, the home economics department, and the university's agricultural extension service.

The stone-faced building with more than 230 rooms has both glass brick and steel windows. Central vacuum and air systems serve the structure, the main portion of which is E shaped. A feature of the main building is an auditorium, seating 300, that can be used for classes, general meetings, and by state agricultural groups meeting on the campus. An attractive color scheme is carried out in offices, classrooms and laboratories.

Two separate sections of the agriculture building, which have been in use for more than a year, house the wool laboratories and provide space for meat and dairy work.

The wool laboratories are the most modern in the country and include a scouring train approximately two-thirds of commercial size. Glass brick, also used in this building, provides natural lighting for wool students.

SLAUGHTER OWN MEAT

All the meat used by the university is slaughtered in Section A, which has up-to-date slaughtering facilities and 10 built-in refrigerator rooms ranging from 30° above zero to 5 below. A model salestoom occupies one corner of this section. Also located in this building is a judging arena, seating approximately 1000 persons.

A series of bas-reliefs, depicting various agricultural processes in Wyoming, are incorporated in the exterior wall of the main agriculture building. The education building is decorated by one large bas-relief, located over the doors leading into the auditorium.

Architects for the field house were Goodrich and Wilking of Casper, with Porter and Bradley of Cheyenne as supervising architects. Plans and specifications for the other three buildings were drawn up by Porter and Bradley.

Heat and light for the buildings are furnished by the university's own power plant.

The quarry, which has been operated on a year-round basis since 1948 when modern quarrying equipment was installed, has been temporarily shut down since more than 3000 tons of the sandstone-limestone rock have been stockpiled for future use. This should provide for the needs of the university for 15 or 20 years, university officials estimate. When that runs out, they'll go back to quarrying again.

Top on opposite page: Glass front of men's new residence hall at University of Wyoming. Bottom: Portion of the lounge.



Top: The Student Service Center at the University of Florida. Center: A covered promenade extends the full length of the concave front of the building. Bottom: Climate permits eating on the terrace much of the time.



STUDENT SERVICE CENTER

at Florida wins wide favor

GEORGE F. BAUGHMAN

Business Manager
University of Florida

BUILT WITHOUT COST TO THE TAXPayers, a new Student Service Center at the University of Florida, Gainesville, has been completed on a pay-as-you-go basis.

This building, of interesting architectural design and interior decoration, combines several functions of university life. Under its roof are the university station of the U.S. Post Office, a book store, soda fountain and grill, a laundry and dry cleaning pick-up station and, on the second floor, space designed for banquets, small conventions, theatricals and dancing.

By virtue of fulfilling these various services, the building also has become

a natural meeting place. Some of these services are performed at other universities by a student union, but at Gainesville it was decided to combine a number of required services in a separate building.

The building was erected by the university's own construction crews, because sufficient funds were never on hand at any one time to permit a building contract. The architectural designs were prepared by Russell F. Pancast and Associates of Miami, in association with Guy C. Fulton, architect to the board of control, and Jefferson M. Hamilton, consulting architect to the university.

The cost was about \$600,000, which would have been somewhat lower except that in our pay-as-you-go policy we were caught in the middle of the rising prices engendered by the outbreak of war in Korea. Money for the building was derived for the most part from income from auxiliary enterprises. Under this financing plan materials could not be purchased until the money for them was available or in sight.

A conventional design was discarded as it was found that an irregular shape was more functional and carried a pleasing eye appeal both out-



side and inside. A covered promenade extends the full length of the slightly concave front elevation.

At one end of the first floor is the circular post office. The laundry and dry cleaning pick-up station, the book store, soda fountain and grill, and lounge room also are on this floor. The fountain and grill seats 220 persons and can serve 4000 meals on a staggered basis during a day, taking care of the overflow from the main cafeteria, where a part of the seating space is given over to a dining room for the athletic department.

A banquet hall seating 300 persons and another area known as the Starlight Terrace, seating 100 persons, are on the second floor. The banquet hall has a wood floor so that it can be used for dancing, although terrazzo floors are used throughout the remainder of the building. The banquet hall has its own kitchen, separate from the one that serves the grill on the main floor. At one end of the banquet hall are stage and dressing rooms for amateur theatricals. At the other end is a fireproof projection booth, with control of lighting and sound effects. Unusual ceiling lighting permits the arena presentation of plays from the center of the dance floor.

Outstanding features of the building, other than its fluid and irregular shape, are the extensive use of glass, some of the largest windows being 15 by 15 feet; the use of natural brick not only for the exterior walls but also for part of the interior walls, and the elaborate though tasteful use of color on interior walls. Chartreuse dominates the room used for banquets and dancing and the women's lounge, while deep forest green and yellow in combination are used in other areas. These colors with partial deep red brick walls trimmed with warm crab orchard stone produce a striking effect.

Interior furnishings are in keeping with the modern wall treatment. Furniture in the book shop was specially designed along functional lines.

The building is air conditioned throughout and the ceilings have been given acoustical treatment. Indirect lighting adds to the generally pleasing effect. Glass doors, combined with the large amount of glass windows, heighten the all-glass appearance of the structure.

The building has a reinforced concrete frame, with the addition of structural members to give strength



Above: A portion of the book store showing the fountain pen counter and "date bait alley." All furniture in the shop was specially designed along functional lines.



Below: The soda fountain and grill seats 220 persons and can serve 4000 meals on a staggered basis during a day.

to the section used for dancing. The brick used for both exterior walls and interior trim is a Florida product from the clay banks of the Chattahoochee River, made by inmates of a state institution. Ordinarily employed as a backing brick because of its irregular shape and the fact that it fractures easily, it was used on this job because of its wide range of colors and its deep and spotty fire-flashing.

The Student Service Center is only one part of a large expansion program that has been going on at the University since the end of World War II. Authorities are working on a 20 year building program.



GROUPS OF EIGHT

are the basis of the Knox College

HOUSE PLAN

CHARLES H. PEAKE

Dean, Knox College
Galesburg, Ill.

***Small units contribute largely
to the student's intellectual,
social and personal development***



THE HOUSE PLAN AT KNOX COLLEGE, Galesburg, Ill., with floor groupings of eight, marks an interesting departure from current trends. Many educational institutions have large residence halls with floor groupings accommodating from 30 to 100 students.

Because the Knox House Plan is an integral part of the educational program, the architectural design of the buildings is a physical expression of the plan. The design is intended to promote effective study and constructive group relationships in an atmosphere of gracious living, and to eliminate or minimize the chief obstacles to these ends—student traffic and activity noises, the restlessness and impersonality of massed numbers.

The plan calls for low, three-story units, divided into two entry sections housing 24 students each. The entries are located on opposite sides of the building.

Each floor contains four double rooms opening into a large living room. Soundproofed stairs open into the living room on each floor, thus eliminating corridors, which constitute a major noise factor in conventional residence halls and which too often create a hotel or institutional atmosphere. Ceilings are soundproofed, and the units contain no recreational or service facilities.

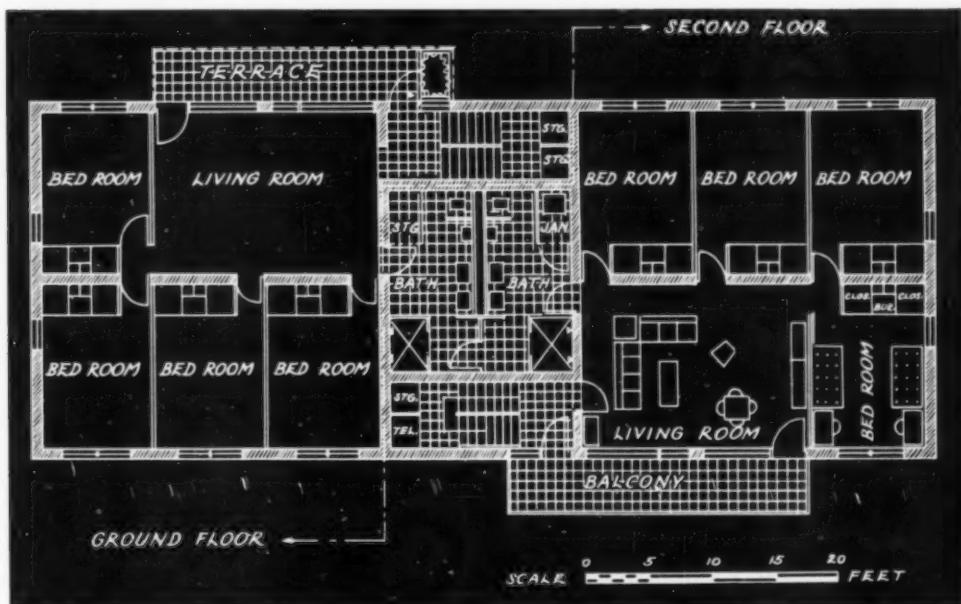
Some of the living rooms contain fireplaces, and a living room is provided for every eight students. This

of whom is assigned to each entry section. The resident adviser reports to the dean of students, and his counseling function is coordinated with the counseling system of the college.

The resident adviser has great influence in determining the character of student life in the residence halls, and, as it often happens, the man with the requisite qualities is married. The plan takes this fact into consideration. Instead of a small bachelor's apartment within a unit, the resident adviser's quarters is a separate bungalow, joined

meals and in which informal record concerts and student discussions may be held.

Dining space devoted solely to eating purposes imposes unnecessary restrictions on highly desirable and much needed space, so the Knox Plan provides for one large hall divided into dining units by folding walls. The entire room can be converted easily to a banquet or dance hall. For daily use, however, the dining units will correspond to the organizational units, that is, a section for each resident



Floor plan of one of the 48 student units in the Knox College House Plan.

room, which on the first floor opens upon a terrace and on the second and third floors upon a balcony, becomes part of the student's immediate living quarters, giving him a homelike sense of space and comfort. With modern furnishings the room provides a pleasant, dignified atmosphere for conversations or group discussions; it serves for leisure reading or midnight study when the roommate wants to sleep.

On the personnel side, the plan provides for a faculty resident adviser for every three units. He acts as adviser to student organizations, is available for academic and personal counseling, and has general responsibility for student life in his units. Assisting him are the staff counselors, seniors, one

to one of the units by a glass-enclosed breezeway, and spacious enough for two. It contains a large living room opening upon a terrace, a bedroom, bath, and pullman kitchen.

Recreational, service and student activity needs are provided for in a building centrally located with respect to the various units and the direction of traffic. This building, which contains the dining rooms, will handle such services as mail, laundry and cleaning. It also will provide space for billiards, ping-pong, television, student government, arts and crafts, camera club and record playing. It will contain a "gentleman's library" for leisure reading and a large lounge in which students may gather before and after

adviser and his group of 144 residents. The tables will vary in size and shape, seating four, six or eight students, thus creating an intimate, dignified, unregimented atmosphere.

The student organization develops naturally out of the architectural plan. The entry divisions make possible a broad base of student participation so that more students will have an opportunity to develop qualities of democratic leadership and to learn democratic responsibility. Each entry will have its own organization and will be represented in the council governing the entire system. The council will occupy a position comparable to that of the Interfraternity Council and the Pan-Hellenic Association.

"SERVICE" BUILDING

is all that the name implies

LESTER S. RIES

Superintendent

Department of Buildings and Grounds
Oberlin College, Oberlin, Ohio

OBERLIN COLLEGE'S NEW SERVICE Building, attached to the central heating plant, forms an exciting combination with setbacks ranging from the 90 foot high heating plant at the north to the 18 foot high carpenter shop terminating the building at the south.

Each shop has a solid birch entrance door in natural finish. The wall on the south has two large openings equipped with motor operated steel and glass doors painted cerulean blue. The roof of the blond brick building is of five-ply asphalt covered with slag. Fenestration is accomplished by means of units of four steel sash, each 36 inches wide and 5 feet 6 inches high repeated around the building, with masonry pilasters so situated as to provide the necessary wall strength.

A heavy duty asphalt top pavement (and parking area) provides truck and

automobile access to three sides of the building.

This service enterprise is located in a section of the campus occupied by the new College Market and a recently constructed 10 stall truck garage. The heavy trucking for the college is concentrated in this area, which also provides ample automobile parking for mechanics, faculty members, staff and salesmen.

The main entrance of the Service Building is on the north side. Neat bronze letters carry information of its occupancy. A projecting roof completely covers the entrance way, which is illuminated by two flush ceiling lights, each 2 feet in diameter.

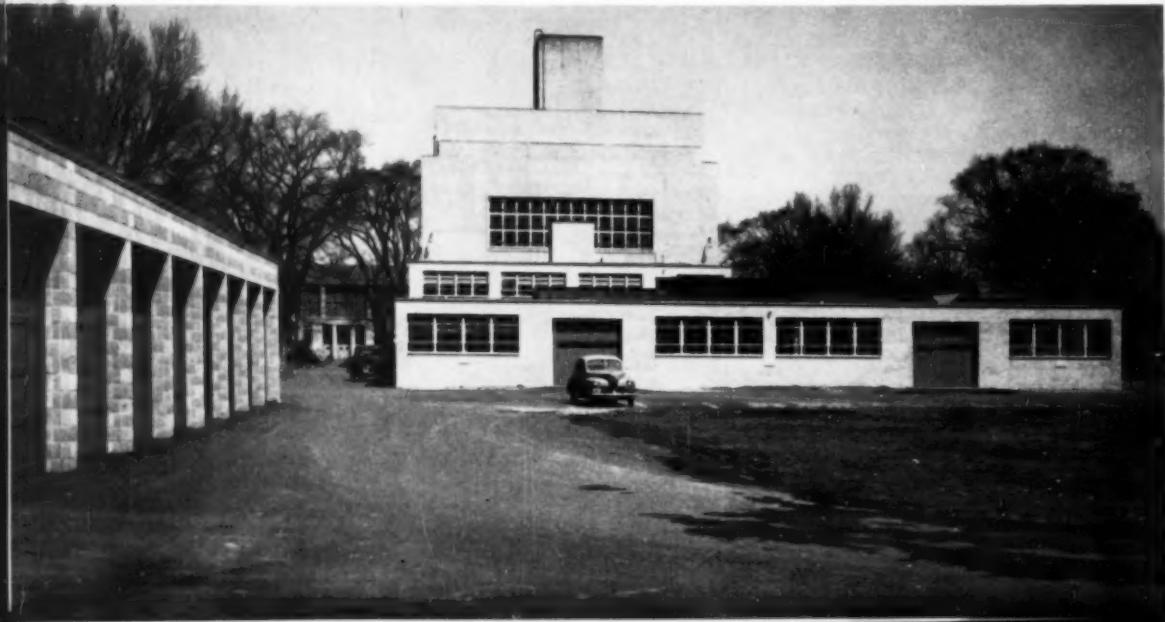
Beyond a small vestibule, at the main entrance, is the departmental office, with steel railing enclosing an adequate central working space. Steel and glass partitions along the east

side provide offices for the purchasing agent, assistant superintendent, secretary and the superintendent. The floor covering is a warm toned reddish-brown asphalt tile. Illumination is achieved by adequate units of 4 foot fluorescent ceiling lights. The ceiling of the entire office area is covered with 12 inch square acoustic tile. The masonry walls are unfinished concrete block and gray brick.

The usual visible card index files, letter files, desks and other office equipment are in evidence. A large safe houses, in addition to records, nearly 2000 duplicate building keys. The vault provides space for blueprint storage and personnel files.

A recess at the north end of the office, serving as a waiting room, is lined with chairs and a magazine table. On the walls of this waiting room are hung the pictures taken annually of the entire staff. Off the main office is a conference room and library. The corridor between the conference room and the superintendent's office leads to a large, well lighted space equipped with drafting tables, bookkeeping machine and records.

To the west of the main office, across a 5 foot corridor, is the stock room. Facing the corridor from the stock room is an ample counter for issuing supplies. The stock room is equipped with free-standing and wall-supported steel shelving. A covered unloading platform, adjacent to the stock room, serves for deliveries. The delivery platform is separated from the stock room proper by an automatic steel rolling door. A freight elevator in the stock room serves the basement, where stock



is kept, and the second floor. The basement stock room is equipped with racks and bins for pipes and pipe fittings, racks for barrel storage, and so forth.

South of the office a ramp leads to ground level with space on the east for janitor equipment storage, such as scaffolding, heavy duty vacuum equipment, and scrubbing machines. South of this space is the paint shop with shelving for broken packages of materials, a spray booth, adequate working space, and an office for the foreman.

The plumbing shop, west of the corridor, is equipped with threading machines, shear, brake and metal shelving for plumbing supplies.

The electric shop, adjacent to the plumbing shop, has metal working lathes, drill press, motor repair equipment, bins for vacuum cleaner parts, and refrigeration testing and repair equipment. Stationed in this shop is the master clock that governs the clocks and class bells throughout the academic buildings. A radio receiving set for the time signals from Arlington National Observatory is located conveniently near the master clock.

The central corridor terminates in a carpenter shop completely equipped with lumber storage racks, partitioned office for the carpenter foreman where the key making machine is housed, and certain building hardware storage. One corner of the shop is reserved for furniture repair, and at times during the school year students from the education department work at benches on assigned projects for academic credit. The carpenter shop is equipped with a 12 foot by 64 foot 6 inch skylight. The south wall of the carpenter shop is the south exterior wall of the Service Building and is pierced by two large openings to permit trucks to load and unload on the carpenter shop floor. These openings have motor operated steel and glass overhead doors.

If we return north in the main corridor the first shop on the west is a glass storage shop with glass cutting table and tools, and beyond that area is the mason shop for the storage of mortar mixing boxes, scaffolding and special cements.

Continuing north up the main corridor is a battery of U.S. mail boxes for incoming and outgoing mail serving the 11 faculty offices and college stenographic office on the second floor. The main entrance for the second floor offices is at the ground level in the



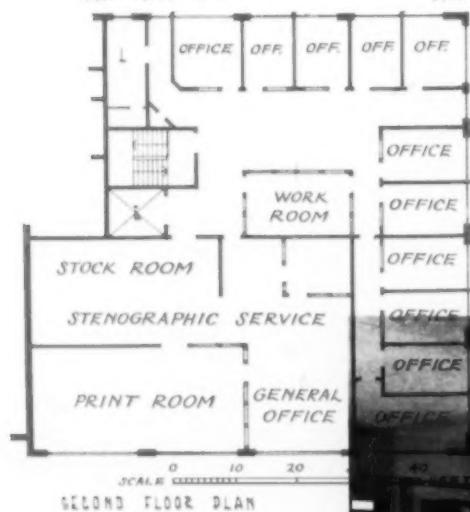
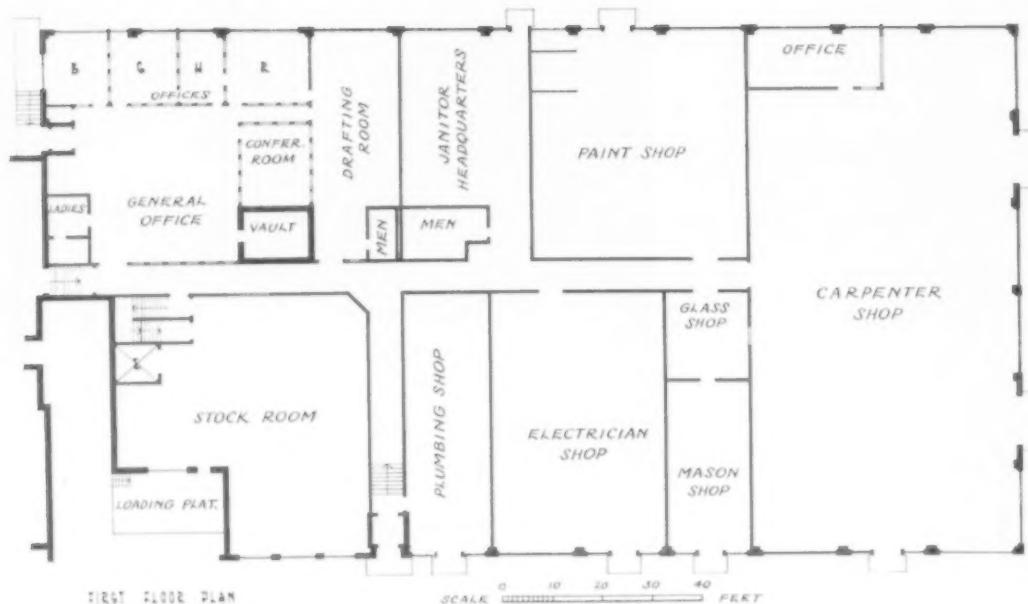
Above: View of the carpenter shop. **Right:** Looking down an aisle in the stock room on the first floor. **Opposite page:** South elevation of Service Building with heating plant in the background. Ten-stall garage is seen in the foreground.



center of the west side of the building. A stairway leading to the second floor, adequately lighted by means of a skylight, emerges into a waiting room lined with tables, chairs and shelving. On the tables and chairs are current newspapers, magazines and other periodicals having to do with the three departments whose offices are located in this space, *viz.* economics, political science, sociology and anthropology.

The office partitions in the second floor area are a combination of plywood and glass. The offices are well

lighted offices and range in size from 9 by 14 feet to 12 by 14 feet. The windows are factory type units 39 inches wide and 5 feet 6 inches high, hinged for ventilation. Each office is equipped with a desk, desk chair, one or more side chairs, bookshelves and, in some cases, built-in shelving and cupboards. In the center of the second floor space is a commodious sociology workroom equipped with shelving, drawing boards, tables, chairs and computing machines. The outside walls are concrete block and gray brick. The floor is covered with the warm



Above: First floor plan. Ceiling height of shops is 12 feet; of offices, 8 feet 5 inches. Left: Second floor plan. Ceiling height on this floor is 9 feet 10 inches. Below: View of the main general office.

necessary office equipment for her assistants.

Since occupancy by the department of buildings and grounds in September 1949, the building has proved as useful and practical as was hoped for during the planning stage. In Webster's dictionary "service" is defined as "the performance of acts for the benefit of others." This building makes it possible for the staff at Oberlin College to justify this definition.



colored mastic tile similar to that on the first floor. Lighting is provided by means of 4 foot fluorescent tubes equipped with egg-crate fixtures.

The entire west half of the second floor is occupied by the college stenographic department. In this space an adequate supply of paper stock is kept and several machines, such as duplicators, paper folder, paper cutter, typewriters, and vacuum frame and arc light for making plates. The head of the department has her own private office and an outer office with the

PART II

VISIBILITY AND THE USE OF COLOR and signaling devices have simplified the accounting problems connected with housing operations at the University of Florida.

Revision of the accounting controls came up a few years ago, soon after the revision (discussed in Part I in the January issue) of the assignment system—the other half of the basic business operation in housing at the university.

The need for greater precision—and for speed—in this accounting portion of the operations became critical with the postwar acquisition of seven new halls. By that time the financial transactions, and problems, had increased fivefold over the prewar era, with respect to both gross income and bonded indebtedness. The margin of possible operating error, as represented in maximum allowable vacancy loss, was reduced to a very low percentage in order to balance operating budgets without additional increases in rental rates.

So, the 1939 files on account control systems were hauled out, dusted off, and reconsidered. Fortunately, they had been filed but not forgotten.

Some improvements had been made in operating procedures. Foremost among these were:

1. Use of continuous flow, carbon interleaved, machine run forms—all uniform in size—for assignment notifications, debits and receipts.

2. Elimination of detailed "debit-credit-balance" posting to individual accounts by keeping outstanding charges in open-book, post-binder ledgers and sending the debits to individual file folders as accounts were paid.

THERE WERE NEW PROBLEMS

Those two improvements provided some immediate answers, but not all the answers that were required. New problems had arisen, notably:

1. Establishment of three area offices, one for each of the widely separated building groups of dormitories. The central office handles assignments, accounts and files; the area offices handle checking in and out, directory service, and message delivery. Consequently, each area office required a



ACCOUNTING CONTROLS

in student housing

CARL B. OPP

Assistant Director of Housing
University of Florida, Gainesville

record of some kind for each person entitled to its facilities and services, but the central office could not perform its function if its basic individual records were divided among three area offices.

2. Assignments were subject to automatic cancellation (so space could be reassigned promptly) if rents were not paid by the date stated on notifications. This requires continual re-checking of outstanding assignments to prevent holding space beyond the due date.

ACCOUNT AND KEY CARDS

A visible card index was selected as the base unit and the 5 by 8 inch card as the basic form. To solve the problem of the area and central office requirements, two cards were designed. The basic account card was designed

with a fold-up tab at the bottom; this tab comes above the transparent celluloid tip at the bottom of the file pocket and forms a pocket within the pocket. The applicant's name and other data are typed on this card, with the name being typed on the top edge and on the fold-up tab at the bottom. The account card is not removed from the pocket so long as the account remains active.

To provide for the needs of the area offices a key card was designed and printed in a color contrasting to the account card. This card, which is typed at the same time as the account card, provides space for name and home address at the top, with the rest of the card allotted to space for various room assignments, key receipt signatures, and line index directory verifications. The key card fits over the

account card with its bottom edge under the fold-up tab.

Each pocket has a signal slide for use on the scale printed on the account card fold-up tab. The first four positions from the right side indicate school terms for which the application may be made. The fifth position shows assignment made but rent not yet paid. The next seven positions show varying amounts of outstanding charges. The final position at the center of the card shows a balanced, active account. Under this design the visible signal does triple duty, while the left side of the card is open for further signaling devices if needed.

HOW SYSTEM WORKS

An account card and a key card are typed for each application after the receipt for the deposit is written. The school period for which the application is made is noted on both cards. The cards are placed in the pocket for their alphabetical position, and the slide is adjusted to the school period for which the application is made. The application is placed in the file for the school period in the order of its deposit payment date.

When assignments are being made, the assignment clerks take the applications in chronological order. Within the group of applications eligible for assignment at one time, adjustments are made to meet roommate requests, if possible, and to locate applicants who may require special rooms. As each applicant's room is selected his name and other data are entered on the assignment record card for the room. Room number, rate and other data are coded on the application, which is then handed to a clerk for typing the notification of assignment, continuous flow forms being used. After the notification has been typed and checked, one copy is sent, by open-faced envelope, to the applicant. The other copies go to the account clerk, who places them in alphabetical order, stuffs them into the pocket holding the key card and account card, and moves the signal to the "assigned" position.

As receipts for payments come through they are posted to the file copy of the notification, and the original copy is released to the business office as an account debit on the student's general ledger. The room number is posted to both key card and account card, and the signal is moved to show the balance status of the

account. The key card is pulled and sent to the area office to authorize admission of the assignee when he arrives to claim his room, provide a means for signing out his room key, and provide, with the other key cards, a residents' directory.

When the deadline for rent payments on advance assignments arrives, making cancellations is a matter of checking only those accounts which the signals show as merely "assigned."

When a student withdraws from housing, he checks out at the area office which forwards his key card and room check-out form to the central office. The check-out form gives information on room conditions with reference to damages or shortages and the resident's wishes on his account settlement—whether to close it or to place his application on file for a future period. As these forms are received at the central office, action is taken in accordance with the requirements of the account. During rush periods forms can be stuffed in the card index file pocket for the account and the pocket signaled for the action to be taken after the rush. This procedure prevents growth of vertical "side" files and the necessity for checking every account to be certain all requested adjustments are made.

HOW SYSTEM HELPS

Net gains from the installation of this system have been:

1. Coordination of area and central office records without unnecessary duplication of information, particularly during rush periods.
2. A guard against double assignments and failures to assign if applications are misplaced.
3. Reduction in time and labor required to check the status of accounts, make adjustments in accounts, or follow up on collections.
4. A uniform, neat, durable and well protected record system that expedites work flow and prevents delays if key personnel are temporarily absent.
5. "Made" work, such as debit-credit-balance posting, eliminated.
6. Account records closely and easily coordinated with space records.

APPLIED TO SUPPLY ROOM

Problems created by increased individual linen and equipment rental accounts, handled through the housing office supply room, were also met by using visible card index account con-

trol methods. Blankets, pillows and lamps are rented and checked out by the school term, while combinations of linens, selected according to individual requirements, are rented for any given number of exchanges prepaid. Linens are exchanged, dirty for clean, not less than once per week and not oftener than the number of exchanges paid in advance. Only the original check-out and closing check-in are received.

Information on the supply room copy of the check-out receipt is coded to an equipment supply card that is placed in a card file pocket and indexed by a title insert bearing the resident's name and address. When linens are exchanged, the counter attendant has only to date-stamp the account card and make the exchange, unless of course an account is being opened or closed or a linen rental period is being advanced. Reference to account cards in the file trays behind the counter is both rapid and easy, and lines of customers who are waiting for service are almost eliminated.

This installation has reduced multi-copy paper work and receipting of small sums to the minimum, speeded service, reduced chances for errors, and simplified inventory control. When a resident prepays his linen account for a semester 16 pieces of paper work are eliminated. As the last inventory showed more than 1000 individual accounts for the current school term, it is evident that a tremendous amount of "paper-pushing" has been eliminated, even though a relatively small percentage of the accounts were prepaid for the entire term.

Elimination of unnecessary detail and speeding up exchanges through the use of a system of visible record controls made it possible to establish two area supply rooms (additional to the main supply room) without additional supervisory personnel other than part-time counter attendants.

That, then, is how the basic records systems in a mushrooming public service organization—which is housing at a state university—were modernized and made visible. It is also the story of a systems specialist's faith in his product and patience in his presentation of it. Finally, it is the story of persistence by a trio of junior executives in the search for systems that would not only save time and money for the business but also would improve the service to the public that supports the business.



IMPROVING MORALE *in college residence halls*

JOHN W. KIDD

Resident Adviser
Mason-Abbott Hall
Michigan State College

WITH ALL THE CREDIT IN THE WORLD to Moreno, Jennings and others who have contributed to the development of the concepts and technics in the area of sociometry, I shall not bore those cognizant or confuse those not cognizant with the apparent mysteries of this field by an extended presentation of technical details.

Sufficient it is here to point out that through confidential questionnaires one may, under proper circumstances, obtain information that reveals certain relationships within a group of people. For instance, one may discover the outstanding leaders in the group, those best liked on a friendship basis, as well as those least desired by the group as friends or leaders. While such a study should not be undertaken haphazardly or without considerable insight into the process, such a survey may be successfully instigated by the nonspecialist and does not necessarily involve an overwhelming amount of human labor. That the product may be worth far more than the effort involved is indicated by the experiences recounted here.

JUDGMENT SOMETIMES WRONG

While we are prone to award ourselves superior powers of observation and, often for lack of more accurate information, insist that we can tell who are the leaders in a group, who is well liked and disliked, such conclusions are not always reliable. Have you not been wrong at least once in such a judgment? Can you not remember a time when you selected and installed in a position of nominal

leadership an individual in whom you had the greatest confidence, only to see the group concerned simply refuse to accept his leadership? Can you not recall an individual whom you liked and who, you assumed, was liked by just about everyone but who, you later discovered, was an unbelievably unpopular person? I can. Many of the people I know who have had extensive experience in the selection of leaders admit that they, too, have had such disappointments.

In the residence hall such an error can be well-nigh disastrous, especially when it involves a student from the resident group who is employed by the administration and given certain responsibilities concerning fellow students. Having once experienced such a catastrophe, the administrator usually is willing to go to great lengths in attempting to avoid such errors in selection.

Sociometry is the most promising method of eliminating the guesswork from such judgments. Among the six men's residence halls of approximately equal size at Michigan State College, one of them has for two years been the scene of the sociometric approach to administration.

After 94 per cent of the 639 residents in this hall had returned a confidential questionnaire asking for their choices and rejections of friends and leaders, each resident was assigned a score equal to the number of times he was named as a best friend minus

the number of times he was named as one most reluctantly accepted as a friend. This was called the friendship score. Similarly, each resident was assigned a score equal to the number of times he was chosen as a leader minus the number of times he was named as undesirable in that capacity. This was called the leadership score.

The student administrative functionary in each section of the hall, who has under his jurisdiction from 50 to 75 students, is called the resident assistant. In this hall his rôle is clearly defined as that of leader, friend and particularly helper to the students in his section—not that of policeman.

SOCIOMETRIC TECHNIC HELPS

Of the nine resident assistants employed in the hall at the time of the survey, one had been the subject of many student criticisms and was thought to be somewhat unsatisfactory in the position. The questionnaires revealed that his leadership score was zero while that of the other eight was 20 or higher. He was the kind of mistake that the sociometric technic enables one to avoid. The unpleasant situation was relieved at the end of that term as he left the residence hall for other reasons. To replace him, a student was appointed who, otherwise acceptable, rated tops on the leadership score. The conversion of that section from a disorderly, unhappy, critical group to a cooperative, spirited, orderly and happy group seemed to be little short of a miracle.

When five other resident assistants had to be replaced because of gradu-

tion, the new ones were chosen from those students who stood high in the leadership and friendship scores awarded them by their fellow students. During the ensuing year a similar questionnaire revealed that all nine resident assistants continued to be highly acceptable to their respective groups and, in addition, provided information vital to making good selections for the next year. The success of these men has attracted widespread attention, and the entire hall has taken on a spirit of cooperativeness fairly unique in residence halls.

Other criteria should certainly be used in the selection of these student functionaries, probably including: (1) satisfactory academic record to the point that the position will not prove to be too great a burden upon them; (2) high ability as indicated by scores on standardized tests to the same point as above; (3) good reputation with staff; (4) desirable appearance and speech; (5) desirable philosophy and interests, and (6) general maturity in relation to other students.

The friendship and especially the leadership ratings from the questionnaires will tend to reflect indirectly all these traits, but the actual ratings should be used as vital factors and as the deciding factors when other criteria are approximately equal respecting two or more candidates for the same position. Further, one rated low by his fellow students on friendship and especially leadership should be considered to be temporarily ineligible for appointment to such a position of leadership.

SYSTEM PROVES ACCEPTABLE

During its brief existence the system has been accepted by all concerned. The resident assistants themselves realize that their success depends to a great extent upon their being accepted as real leaders, not merely nominal ones, by the men in their sections. The students realize that they have a voice in the selection of resident assistants. The administration has more confidence in the judgment of these functionaries.

Extreme care should be exerted to preserve the anonymity of the raters. The technic should be applied only if the participants have confidence in its sincerity of purpose and the preservation of their individual integrity.

This aid in the selection of leaders is no panacea. The administration must be responsive and responsible.

These student leaders must have confidence in their employer based on the behavior and reputation of the employer, not merely upon his words. In addition to the aforementioned

advantages, this technic serves to reveal isolates and rejected students as well as the nature of friendship groups and cliques, all of which is invaluable in the advisory program.

SALE AND LEASEBACK OF COMMERCIAL PROPERTY

T. E. BLACKWELL

Vice Chancellor and Treasurer
Washington University, St. Louis



IN DECEMBER OF 1943 THE CENTURY

Electric Company of St. Louis found itself in need of additional working capital. Accordingly, it sold its foundry to the trustees of William Jewell College of Liberty, Mo., for the sum of \$150,000 and, simultaneously, leased the property back from the college for a term of not less than 25 years and not more than 95 years. The property had cost the company \$531,710.97, according to its books of account.

Under the terms of the lease, the college will receive the sum of \$367,500 as rental over the first 25 years. The company agreed to pay all charges against the property for which William Jewell College would be liable as owner, with the exception of state, city and school district property taxes. The charter issued to William Jewell College by the state of Missouri in 1849, and amended in 1851, has been construed by the supreme court of Missouri in 1943¹ as granting exemption to all property owned by the college, even commercial property held as an investment, from state and local property taxes.

The Century Electric Company, in preparing its federal income tax return for the year 1943, claimed a loss of \$381,710.97 on the transaction, i.e., the difference between the cost of the property and the amount for which it was sold to the college. The com-

missioner of internal revenue declined to recognize this deduction from the gross income of the company, contending that the company has sustained no real loss through the transaction. The tax court² sustained the ruling of the commissioner, basing its decision on Section 112 (b) (1) and 112 (e) of the Internal Revenue Code. These sections of the code provide that no loss or gain is sustained if a taxpayer exchanges property for property of like character.

TAX COURT'S RULING AFFIRMED

Judge Johnson of the tax court ruled that the successive steps of the sale of property and its lease back to the company constituted a single, integrated transaction, and must therefore be treated as an exchange of real property for cash and a leasehold. The decision of the tax court was affirmed on Oct. 31, 1951, by the United States court of appeals.³

English corporations were making use of the sale and leaseback as a convenient device for corporate financing as early as 1882, as indicated by litigation of record,⁴ but it did not become an important factor in American corporate finance until 1945. The

¹Century Electric Company, 15 T.C. 581 (1950).

²Century Electric Co. v. Commissioner of Internal Revenue: 72,620 P.H. Fed. (1951).

³Yorkshire Ry. Wagon Co. v. Maclure, 21 ch. D. 309 (1882).

⁴Trustees of William Jewell College v. Beavers, 171 S.W. 2d. 604 (1943).

growing need for working capital and the difficulties of raising funds through the sale of common stock induced a number of corporations to seek a solution to their financial problems through the sale of their physical plant assets to institutional investors, subject to the retention of a leasehold interest.

ANOTHER EXAMPLE CITED

Another example of this method of corporate financing was the sale, on June 1, 1950, by the Allied Stores Corporation of the buildings occupied by its department stores in six cities to Union's Real Property Corporation, a company organized and wholly owned by Union College. The sale price was \$16,500,000. Simultaneously with purchasing the property, Union's Real Property Corporation leased the buildings to Allied or its subsidiaries for a term of 30 years. To finance the purchase, Union borrowed \$4,000,000 from the Guaranty Trust Company and sold \$12,000,000 twenty-year first mortgage bonds to the Prudential Life Insurance Company at par. Thus, the college found it necessary to invest only \$150,000 of its own funds in the properties. Although the margin between the rentals and what the college will be called upon to pay in interest and amortization of indebtedness will not be large, expressed as a percentage of the gross sum involved, the net return on its actual investment of \$150,000 should be quite attractive to any institutional investor. Moreover, the college will own the property free and clear, after amortization, subject only to the leasehold interest of the original owner. Union College has stated that it does not intend to use any of the return from rentals for at least 20 years.

The advantages to the Allied Stores Corporation of this method of raising capital are significant. It expects to charge the rental payments each year

as a business cost, in lieu of depreciation of its own assets. Since the amount of the rental is fixed by the terms of the lease, the company is relieved of the necessity of debating the question of the useful life of the asset with the collector of internal revenue. Furthermore, the plan permits the corporation, in effect, to amortize the value of the land as well as the improvements, a tax deduction not permissible if it held title to the land. By converting a fixed asset into cash, its financial structure was undoubtedly improved.

The Senate finance committee, in reviewing the growing importance of the "sale and leaseback," stated that it had been characterized as "the most noteworthy financial device of the present century." In its report on the problem, the committee directed the attention of Congress to the fact that, under existing tax regulations, an exempt corporation need not use any of its own funds in acquiring such property for lease, since apparently it could borrow virtually 100 per cent of the purchase price. As stated at the hearings: "There is no limit to the property an exempt institution may acquire in this manner."

Congress, in 1950, closed this and other gaps in the tax laws by the enactment of what is known in the Internal Revenue Code as "Supplement U—Taxation of Business Income of Certain 101 Organizations." It would be impossible to discuss, even in summary fashion, the full implications to the colleges of this important amendment to the Internal Revenue Code within the limits of the present article. It is clearly an attempt on the part of Congress to curb the efforts of certain institutions to obtain increased income by engaging actively in business or commercial ventures unrelated to their major educational and charitable functions. The Senate finance committee,

in its report of Aug. 22, 1950, states: "The problem at which the tax on unrelated business income is directed is primarily that of unfair competition."

The tax free status of Section 101 organizations enables them to use their profits tax free to expand operations, while their competitors can expand only with profits remaining after taxes."

Section 421 (b) of the Revenue Act of 1950 reads in part, as follows: "The term 'unrelated trade or business' means any trade or business the conduct of which is not substantially related to the exercise or performance by such organization of its charitable, educational or other purpose or function constituting the basis for its exemption under Section 101."

STATUS ALTERED

This new tax on the unrelated business income of such organizations was not intended to disturb the passive receipt of dividends, interest, annuities, royalties and rents. However, in the opinion of Congress, when a charitable organization acquires an entire business property, largely with borrowed funds, it has clearly altered its status from that of the passive recipient of investment income to that of an active participant in business.

Under the provisions of "Supplement U," the charitable organization does not lose its inherent status as a tax exempt organization by engaging in an unrelated business, but it must pay a tax on all income derived from such activity, in excess of \$1000 per year. In the case of the leaseback of commercial property, it will be taxed only to the extent the property was acquired or improved through the use of borrowed capital. Only time will reveal how the courts will construe the provisions of this major invasion of the tax exempt status of charitable and educational organizations.

A Unit Cost Analysis . . .

... has been a difficult phase of college budgeting for many years. In the March issue Paul K. Nance of Oklahoma Baptist University will discuss some of the technics and values of a recent unit cost study at his institution.

NONPERISHABLE FOODSTUFFS

How big an inventory shall we maintain?

ANDREW VITALI

Steward
Mount Holyoke College
South Hadley, Mass.

FOOD BUYERS ARE GOING THROUGH one of the greatest periods of uncertainty since 1945. A buyer can no longer place great reliance on reports from the nation's capitol when he is planning his future purchases of food-stuffs.

One report from the Department of Agriculture gives the encouraging news that the country has just harvested one of the largest crops in history and that a great number of head of cattle and other livestock are on the ranches. Then our attention is called to the per capita increase of meat and butterfat available for the country's table. In other words, the breadbasket is filled to the brim. Such information is welcome news to the buyer. With a great abundance of foodstuffs we visualize a great competition in the market with a resultant drop in prices. This is our normal expectation with plentiful supplies in the offing.

REPORTS CONFLICTING

We happily reflect upon the various possibilities. Here is a chance perhaps to lower our institution's food cost or possibly serve steaks or chops on the school menu without increasing the present food budget. A pleasant thought indeed! But then we are awoken by another report from Washington—this time from the Office of Price Stabilization—and it is not so encouraging. It warns us that great shortages of foodstuffs are imminent and, in consequence, higher ceilings will be granted to many producers, packers and processors of food-stuffs.

Now which of these reports are we going to believe? Are we going to

believe the report from the Department of Agriculture or that of the Office of Price Stabilization, or are we going to believe neither of them?

Let us consider this practical question which each of us must answer for himself: What quantity should we buy and for how long a period should we protect our institution against higher prices? If we feel there is going to be a shortage, it might be well to build up our inventory at present prices and try to protect ourselves against future price increases. If, however, we feel that there is no great shortage in sight and that prices are not going to go much higher, then it might be wiser to carry just a small working inventory.

Before we make our decision, consider the present-day fact that in certain parts of the country it is virtually impossible to find rentable warehouses or cold storage space even for small shipments. All large and small warehouses are filled to capacity with foodstuffs and often cold storage plants and even community lockers refuse to accept additional merchandise.

WHAT DOES IT MEAN?

What does all this mean? Obviously the supply is there. To be sure, a large share of it is owned and controlled by the government, but a large portion is being held by private companies and individuals. What disposition the government may make of its holdings we cannot guess. Some say it is reserved for the armed forces both home and abroad; others intimate that since 1952 is an election year all this stored food may be released at some politically advantageous time. A resultant break in the price market would then indicate to the voters that an effort was being made to reduce the high cost of living. As to how much influence can be attributed to these points of view, each buyer must make up his own mind. The amount of foodstuffs held in storage by private interests is obviously for one reason, and that is for speculation.

Uncertain world conditions such as we have today always cause some buyers to prepare for any eventuality. They see the danger of an all-out war and still can remember from the recent one what consequences another catastrophe would produce. However, many are mindful of the possibilities of settlement being reached in Korea and of sudden peace. Such an eventuality

may have a psychological effect upon holders of these supplies, creating a general rush to the market and causing a decided drop in prices.

Thus we face many conflicting factors as we approach the answer to the question of how much we should buy. Let us not neglect, however, to consider the all-important opinions of our professional dealers in foodstuffs before finally coming to a decision.

In discussing the current food situation in general with some of the leading jobbers, I was able to learn that, with the exception of a few isolated items such as peas, peaches and canned corn which happened to be a short pack this year, there is an ample supply of most major food commodities. None of these jobbers are now in a hurry to buy and, when they do so, they expect to buy in small quantities. Some even go as far as to control their canners' shipments by holding back their labels.

I have found them to be very cautious in making their commitments and to show no desire to speculate, their reason being that the ceiling prices are established with the producers and passed on to them. Because of the existence of ceiling prices they see no advantage in carrying a large inventory.

APPLIES TO OTHER BUYERS

What applies to food jobbers in a smaller degree applies to institutional food buyers. In event of an all-out war it would be desirable for the institution to have a large inventory of all foodstuffs on hand, but in all probability we would have rationing again and be forced to declare our inventory. Even though we owned it, we would still be restricted in the quantity we could use.

Institutional food buyers have certain responsibilities, come what may. It is their job to provide sufficient and wholesome food to student bodies and in many cases to the members of the faculty and staff. They cannot afford to run short of food regardless of cost.

Our inventory policy should be a conservative one. It calls for a canned goods and staple items inventory sufficient to carry the institution for a period of three months during the academic year. During long summer vacation periods a smaller inventory is warranted. This policy affords us the opportunity of taking advantage of whatever price drops may take place during the operating year.

College Unions Survey Midwest FOOD PRICES

L. C. SMITH

Manager, Indiana University Memorial Union
Bloomington, Ind.

A SURVEY, MADE OF THE SELLING prices of certain food items on sale at union cafeterias, was made from a sample of 14 colleges and universities located in the Middle West. They were of comparable size in relationship to their student body and in the number of persons served during the school year at the union cafeteria.

Many of the variations that affect the selling price of food could not be controlled or taken into consideration, such as seasonal variation, market cost, quality, cost of food, and others. The survey was based solely on the selling price of the item divided by the ounce serving and using the ounce selling price as a possible base for comparison.

The accompanying tables show the low, high, median and the arithmetic mean. The low indicates the lowest figures quoted by a certain institution. The high is the highest figures quoted. The median is the midpoint quoted when arranged in a low to high sequence. The arithmetic mean is the simple average of the figures quoted.

Each column on the table was arranged and figured independently. Therefore, there is no correlation with the low figure of the item in column oz. of serving to the low figure of item in the column selling price or with the low figure of the item in the column oz. selling price.

Two classes of appetizer were selected: one a recipe soup and the other a juice, as shown in Table 1. The entrees shown in Table 2 were divided into two classes: three meat items and three meat extenders. Coffee and milk, the two beverages selected, are shown in Table 3.

Most college unions are self supporting enterprises. Usually the food department is the largest income producing department; consequently, it is imperative that it operate at a profit. Many students believe the union should sell food for less and they do not hesitate to question price and quality.

TABLE 1 — APPETIZER

| VEGETABLE SOUP | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 5.0 | \$0.10 | \$0.0125 |
| median..... | 8.0 | 0.14 | 0.0187 |
| arithmetic mean..... | 7.2 | 0.14 | 0.0190 |
| high..... | 10.0 | 0.20 | 0.0300 |

| ORANGE JUICE (fresh fruit) | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------------|----------------|---------------|-------------------|
| low..... | 3.0 | 0.09 | 0.0166 |
| median..... | 5.0 | 0.10 | 0.0250 |
| arithmetic mean..... | 4.9 | 0.12 | 0.0244 |
| high..... | 8.0 | 0.20 | 0.0342 |

TABLE 2 — ENTREE

| ROAST BEEF (round) | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 2.0 | \$0.35 | \$0.1333 |
| median..... | 3.0 | 0.45 | 0.1708 |
| arithmetic mean..... | 2.5 | 0.44 | 0.1700 |
| high..... | 4.0 | 0.70 | 0.2333 |

| PORK CHOP | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 2.0 | 0.25 | 0.0625 |
| median..... | 4.0 | 0.35 | 0.0887 |
| arithmetic mean..... | 4.1 | 0.49 | 0.0980 |
| high..... | 5.0 | 0.50 | 0.2000 |

| BAKED HAM | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 2.0 | 0.30 | 0.1000 |
| median..... | 3.0 | 0.45 | 0.1605 |
| arithmetic mean..... | 3.5 | 0.45 | 0.1661 |
| high..... | 4.0 | 0.75 | 0.2500 |

| HAM LOAF | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 2.5 | 0.25 | 0.0625 |
| median..... | 3.0 | 0.30 | 0.1000 |
| arithmetic mean..... | 3.4 | 0.32 | 0.0972 |
| high..... | 4.0 | 0.48 | 0.1600 |

| BEEF LOAF | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 2.5 | 0.25 | 0.0625 |
| median..... | 3.2 | 0.30 | 0.1000 |
| arithmetic mean..... | 3.4 | 0.33 | 0.0972 |
| high..... | 4.0 | 0.48 | 0.1600 |

| HAMBURGER AND BUN | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 1.5 | 0.20 | 0.0571 |
| median..... | 2.0 | 0.20 | 0.1000 |
| arithmetic mean..... | 2.2 | 0.22 | 0.1026 |
| high..... | 4.0 | 0.32 | 0.1333 |

TABLE 3 — BEVERAGE

| COFFEE | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 5.0 | \$0.05 | \$0.0071 |
| median..... | 6.0 | 0.07 | 0.0116 |
| arithmetic mean..... | 6.3 | 0.07 | 0.0106 |
| high..... | 8.0 | 0.08 | 0.0140 |

| MILK | OZ. OF SERVING | SELLING PRICE | OZ. SELLING PRICE |
|----------------------|----------------|---------------|-------------------|
| low..... | 8.0 | 0.08 | 0.0100 |
| median..... | 8.0 | 0.09 | 0.0118 |
| arithmetic mean..... | 8.0 | 0.09 | 0.0114 |
| high..... | 8.0 | 0.10 | 0.0125 |

NEWS

College Association Opposes U.M.T. . . Would Abolish 300 Independent Accrediting Agencies . . . Three New Plans for Military Service . . . More Tuition Increases . . . Presidents' Committee Asks Athletic Policy Changes

College Association Opposed to U.M.T.

WASHINGTON, D.C.—The Association of American Colleges at its annual meeting in January adopted a resolution strongly opposing Universal Military Training, stating that "as a permanent policy it is likely to be fantastically expensive, educationally undesirable, morally hazardous, and politically dangerous."

Other resolutions approved by the group asked for the elimination of professionalism in athletics, extension of social security to cover clergymen on college staffs as teachers, and the reduction of income tax obstacles to big donations to educational institutions.

Officers elected for the coming year included the following: president, Dr. M. E. Sadler, president of Texas Christian University; vice president, Dr. John R. Cunningham, president of Davidson College; treasurer, R. H. Fitzgerald, chancellor of the University of Pittsburgh.

Awarded Big Loans for Student Housing

WASHINGTON, D.C.—Drake University, Des Moines, Iowa, and Hampton Institute, Hampton, Va., were recently awarded long-term, low interest rate loans for construction of student residence halls, according to an announcement by Raymond M. Foley, administrator of the Housing and Home Finance Agency. The loans were approved under the provisions of Title IV of the Housing Act of 1950 authorizing loans for college housing directly related to the defense effort.

A loan of \$1,000,000 to Drake University will be used in construction of three residence halls for 585 students, which will cost an estimated \$1,648,000. A loan of \$775,000 to Hampton Institute will be used for

residence hall facilities expected to cost \$809,000 to house 251 students.

Would Abolish 300 Independent College Accrediting Agencies

WASHINGTON, D.C.—The National Commission on Accreditation, representing 1200 institutions of higher education, after more than a year of study, has recommended that 300 independent college accrediting agencies be eliminated.

The commission has proposed instead that the six regional accrediting associations set up by the colleges themselves take over all accrediting and do it on an institution-wide basis.

Dr. Floyd H. Marvin, president of George Washington University and secretary of the commission, cited 23 specific abuses by the accrediting agencies, some of which are as follows:

There are too many accrediting organizations. Originally starting as accreditation agencies for institutions, they are now down to departments and individuals. There is too much duplication, "yet all call for different data." He contended that they are breaking down the institutional rights and destroying the freedom of the faculties and interfering with the responsibilities of governing boards. Their charges and levies, he added, are excessive (affiliation running from \$10 to \$700), and in many cases they visit institutions without their being invited and then ask for a fee if the department or division is to be "white listed."

Dr. Marvin stated that the next move on the part of the National Commission on Accreditation will be the calling of conferences with regional accrediting associations and the independent groups "to try to work out an understanding that will be acceptable to all concerned."

N.E.A. and A.C.E. Offer Three New Plans for Military Service

WASHINGTON, D.C.—In an attempt to submit alternatives to the present suggested legislation dealing with Universal Military Training, a joint declaration of the Educational Policies Commission of the National Education Association and the executive committee of the American Council on Education was released for publication.

The statement was first released at a press conference at N.E.A. headquarters by James B. Conant, president of Harvard University, as chairman of the commission, and Arthur S. Adams, president of the council.

All three plans suggested were predicated on compulsory military service, but made provision for deferment of some type for college students. The plans were submitted without suggesting a priority for a specific plan.

Plan No. 1 provided for induction of young men at 18 or 18½ except where a manpower board determined, from time to time, that service by certain individuals should be postponed while they were effectively pursuing education or specialized training. This also would apply to members of the R.O.T.C. The manpower board would determine the categories of students to be deferred, the standards to be used in screening, and the methods of certifying individuals for continued deferment year after year.

The advantages of this plan were listed as: centralized planning in the assurance of needed manpower flows; development and application of uniform selection procedures; military service rendered at highest potential after training. Among the disadvantages suggested were the loss in simplicity and the limitations of a centralized administration.

Plan No. 2 would provide a recom-

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NEWS . . .

meration that military service begin when education terminates, provided that an administrative agency would have authority to determine the limits as to educational qualifications, duration of education or training, and area of education or training to be applied from time to time.

Some of the advantages suggested for this plan were: It places emphasis upon education and training in lifting men to highest potential contribution when they go into the service of their country; it respects differential capacities and motivation for higher and specialized education and training; it permits adjustment of manpower flow to urgency of need. The disadvantages were said to be the same as to the first plan.

Plan No. 3 would provide for induction of young men at 18 or 18½, unless the individual is enrolled in an expanded system of R.O.T.C. programs providing the flow of trained personnel needed by the armed forces.

One of the advantages suggested for this plan was that it would place upon the military forces the determination of adequate flows of trained men for military service. The disadvantages

were listed as: Long-run manpower needs of both military and civilian economy might not receive weight, and the basis of selection might be limited by the need of the R.O.T.C. program.

In commenting on the manpower situation the report warned: "The American people cannot postpone much longer the decision on how the manpower problem is to be solved."

Other phases of the report dealt with the place of higher education in society and ways and means by which this program of education might continue to make an effective contribution. It was pointed out that the education of children is not deferrable.

Embezzlement Charges

PROVIDENCE, R.I.—Lester L. Lapham, former assistant treasurer and bursar of Brown University and president of the Eastern Association of College and University Business Officers in 1943, was charged January 26 with embezzling approximately \$30,000 from university funds. Lapham was relieved of his duties last September, according to Dr. Henry M. Wriston, president of the university.

V.A. Issues Ruling on G.I. Course Changes

WASHINGTON, D.C.—The Veterans Administration recently advised the nation's million and a half veterans of the rules and regulations they must follow in case they want to change their courses. The rulings, V.A. said, apply to veterans who started their training under the G.I. bill before the July 25, 1951, cut-off date and have remained in training since.

Such veterans may change their courses only while they actually are in training or during a necessary temporary interruption, but then only for reasons satisfactory to the Veterans Administration.

Satisfactory reasons for change are these:

1. When a veteran is not making satisfactory progress in his present course, and the failure is not due to misconduct, neglect or lack of application. He then may be permitted to switch to a course in which he would have good prospects of success.

2. When the course to which he wants to change is more in keeping with his aptitudes, previous experience, or other pertinent facts. V.A. said it will not approve a course change for a veteran who merely has changed his mind about what he wants to study; instead the fact would have to be established that he is obviously misfitted in his present course.

3. When the new course is a normal progression from his current course and will help him reach his educational or vocational objective. In this case, the veteran must file his application for the advanced training sometime before he completes his present training.

V.A. added that course changes will not be permitted merely for the convenience of the veteran, with respect to his job, commuting distance from the school or training establishment, or the place where he wants to live.

Issue Interpretation of Construction Regulations

WASHINGTON, D.C.—Delivery of controlled materials, delayed from a previous quarter, may be accepted on a construction project without the necessity of charging them against the allotment for the current quarter, ac-

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NEWS . . .

cording to an interpretation issued January 16 by the National Production Authority.

The interpretation of Amendment 1 to CMP Regulation 1, which was made January 5, is contained in an instruction forwarded to all Department of Commerce field officers. N.P.A. explained that the amendment of Section 20(f) of CMP Reg. 1 applies to construction as well as to production, although construction is not specifically mentioned in the regulation.

The amendment of Section 20(f) permits controlled materials users to charge deliveries of steel, copper and aluminum to their allotments for the quarter during which delivery was originally scheduled, and not to a later quarter, even if delivery is delayed until a subsequent quarter.

Previously, delivery delayed more than 15 days after the end of one quarter had to be charged against the builder's allotment for the next quarter, when delivery was actually made.

Committee of College Presidents Asks Changes in Athletic Policies

WASHINGTON, D.C.—The special committee of college presidents appointed by the American Council on Education to investigate the current intercollegiate athletic situation recently completed its study and submitted its proposals to the executive committee of the American Council on Education for action.

The committee, under the direction of Dr. John A. Hannah, president of Michigan State College, recommended that:

1. All postseason games of any kind be abolished.
2. Football games and practice be confined to the period between September 1 and the first Saturday in December.
3. Basketball games and practice be confined to the period between December 1 and March 15.
4. Baseball games and practice be confined to the period between March 15 and commencement.
5. No freshman be eligible to play on a varsity team.
6. A transfer from a junior college put in a year of residence before being allowed to compete in intercollegiate athletics.
7. Scholarships be granted strictly on the basis of the student's educational ability and his needs.
8. No scholarship be for more than the educational expenses of the institution.

9. The department of athletics be conducted as any other department of a college or university with coaches holding the same status as other faculty members, with the same faculty tenure and the same faculty salaries, and that the athletic department be budgeted as any other department.

10. The control of athletics be held absolutely and completely by those responsible for the operation and administration of each institution.

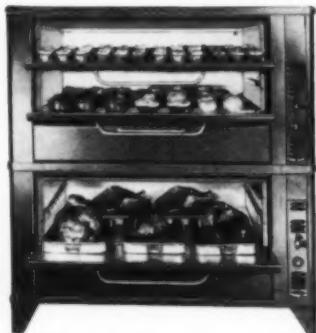
In addition to Dr. Hannah, chairman, those who served on the special committee included: the Rev. Fr. John Cavanaugh of Notre Dame; A. Whitney Griswold of Yale; R. G. Gustavson of Nebraska; Raymond B. Allen, former president of the University of Washington; John L. Plyler of Furman; Victor L. Butterfield of Wesleyan University; John D. Williams of Mississippi; John S. Millis of Western Re-

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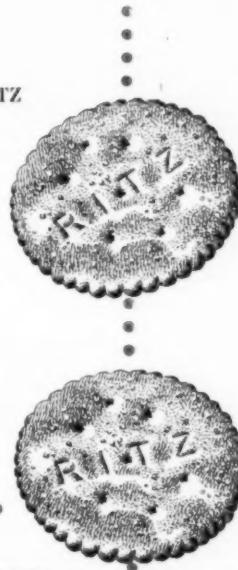
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NEWS.....

serve; Albert Ray Olpin of Utah, and Humphrey Lee of Southern Methodist University.

This committee of college presidents was named for the study on athletics by Dr. Arthur S. Adams, president of the American Council on Education.

University of Michigan Plans Expansion

ANN ARBOR, MICH.—University of Michigan officials announced in mid-

January that plans are being made for an immediate expansion of the university campus across the Huron River in an area north and east of Ann Arbor.

The area where it is hoped the expansion program will be under way by April or May is a tract of 267 acres directly north of a new Veterans Administration hospital. It is 1.1 miles in a straight line from the center of the old campus to the southwest corner of the area across the river.



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Survey Reveals Colleges' Interest in Social Security for Employees

WASHINGTON, D.C.—A recent survey completed by the American Council on Education and reported in Bulletin No. 178 reveals that administrators of state supported colleges and universities are showing an increasing interest in social security coverage for faculty and nonacademic staff.

Questionnaires were sent to publicly controlled institutions of higher education to procure their judgment on whether or not they desire social security coverage. In addition, questionnaires were sent to privately controlled colleges and universities to determine the extent to which the institutions have accepted coverage under Old-Age and Survivors Insurance.

A total of 320 questionnaires were sent to publicly controlled institutions and 230 responded with data. Of these, 99 per cent reported they had a retirement system for their teaching staff and 83 per cent for their nonacademic employees. Of the institutions, 74 per cent favored amending the Social Security Act to permit employees of publicly controlled institutions to be covered by O.A.S.I.; approximately half indicated their institution would probably participate in O.A.S.I. if the law is amended.

Of the privately controlled institutions, 463 out of the total of 525 returned the questionnaire. Of those replying, 93 per cent accepted the option and have included their employees under O.A.S.I. A total of 385 institutions had retirement or pension plans prior to the time O.A.S.I. was made available. Of these, 63 per cent added O.A.S.I. to the existing retirement plan; 32 per cent revised and coordinated the existing plan with O.A.S.I.; the remaining 5 per cent abandoned existing plans and adopted O.A.S.I. Of the 141 institutions that modified or abandoned existing plans, 91 per cent reported that the change resulted in an increase in the benefits to the individual; 7 reported no change, and 6 reported a decrease.

College Denies Legion's "Red" Accusations

BRONXVILLE, N.Y.—Trustees of Sarah Lawrence College recently released a statement denying that any

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INTERNATIONAL BUSINESS MACHINES

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Communist could get or keep a job on the faculty. This was in reply to recent charges by the Americanism committee of the Westchester County American Legion.

A month ago the Legion submitted to the trustees of the college a list of 14 questions concerning alleged activities by Dr. Harold Taylor, college president, three faculty members, and some students who the Legion said were sympathetic to so-called subversive groups.

The board of trustees, speaking through its chairman, Harrison Tweed, stated it had "confidence in the integrity and scholarship of the members of the Sarah Lawrence faculty and will continue to stand on these principles of free inquiry and intellectual independence."

"It is an essential part of good educational policy," the board continued, "that a college ask for no orthodoxy in its teachers as to religion, politics or philosophical theory. If it were

otherwise, teaching would be done not by the faculty but by the governing board of the college. The teacher would be a mouthpiece for the pre-conceived philosophy of the institution rather than a seeker of truth."

Increases Tuition From \$650 to \$850

ANNAPOLIS, MD.—St. John's College announced recently a \$200 increase in tuition for all students, effective next September. The new tuition figure is \$850, making over-all student expenses for room, board and tuition \$1500.

In addressing a college meeting on the subject, President Richard D. Weigle pointed out that expenses of operation have increased to a point where it costs more than \$2800 for a student's education for one year. The new tuition fee is designed to have the student pay a more equitable share of the cost of his education.

The college is aware, Mr. Weigle said, of the hardship that a tuition increase will cause in some instances. He pointed out that every effort would be made by the college to solve individual financial problems. In this connection the college expects to increase by 20 per cent the remuneration for all student employment and will double its present \$9500 fund for supplementary grants-in-aid to needy students.

Princeton Increases Tuition 25 per Cent

PRINCETON, N.J.—A 25 per cent increase in tuition for undergraduates of Princeton University will become effective next fall, according to an announcement by President Harold W. Dodds. The board of trustees has voted to increase the present tuition from \$600 to \$750.

President Dodds declared that Princeton is operating under deficit conditions and that even a larger deficit is anticipated for the 1952-53 academic year.

The additional funds provided by the higher tuition will be used to finance wage increases for faculty and other staff members, to supplement scholarship funds, and to meet the advancing cost of equipment required for teaching and research, Dr. Dodds asserted.

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10 per Cent Wage Increase for Penn State Employees

STATE COLLEGE, PA.—The faculty and staff of Pennsylvania State College were granted salary adjustments amounting to approximately 10 per cent of the total pay roll, according to an announcement by Dr. Milton S. Eisenhower, president.

The adjustments made were approved by the board of trustees at the beginning of the fiscal year last July. The new salaries, however, could not be announced or applied until the college's biennial appropriation from the state had been approved by legislature and governor.

The increase in salary schedules is the first general salary adjustment the staff had received since a modest 5 per cent was granted in February 1949, President Eisenhower said. That increase was inadequate at the time and has long since been offset by inflation, he added. Another moderate adjustment is planned in the near future to ease the pressure of competing wage and salary scales.

Manual on Construction

WASHINGTON, D.C.—The U.S. Office of Education has prepared and distributed a "Manual of Instruction for the Preparation of CMP-4C Applications for School, College and Library Construction." Copies of the manual may be procured through the Division of Civilian Educational Requirements, U.S. Office of Education, Washington 25, D.C.

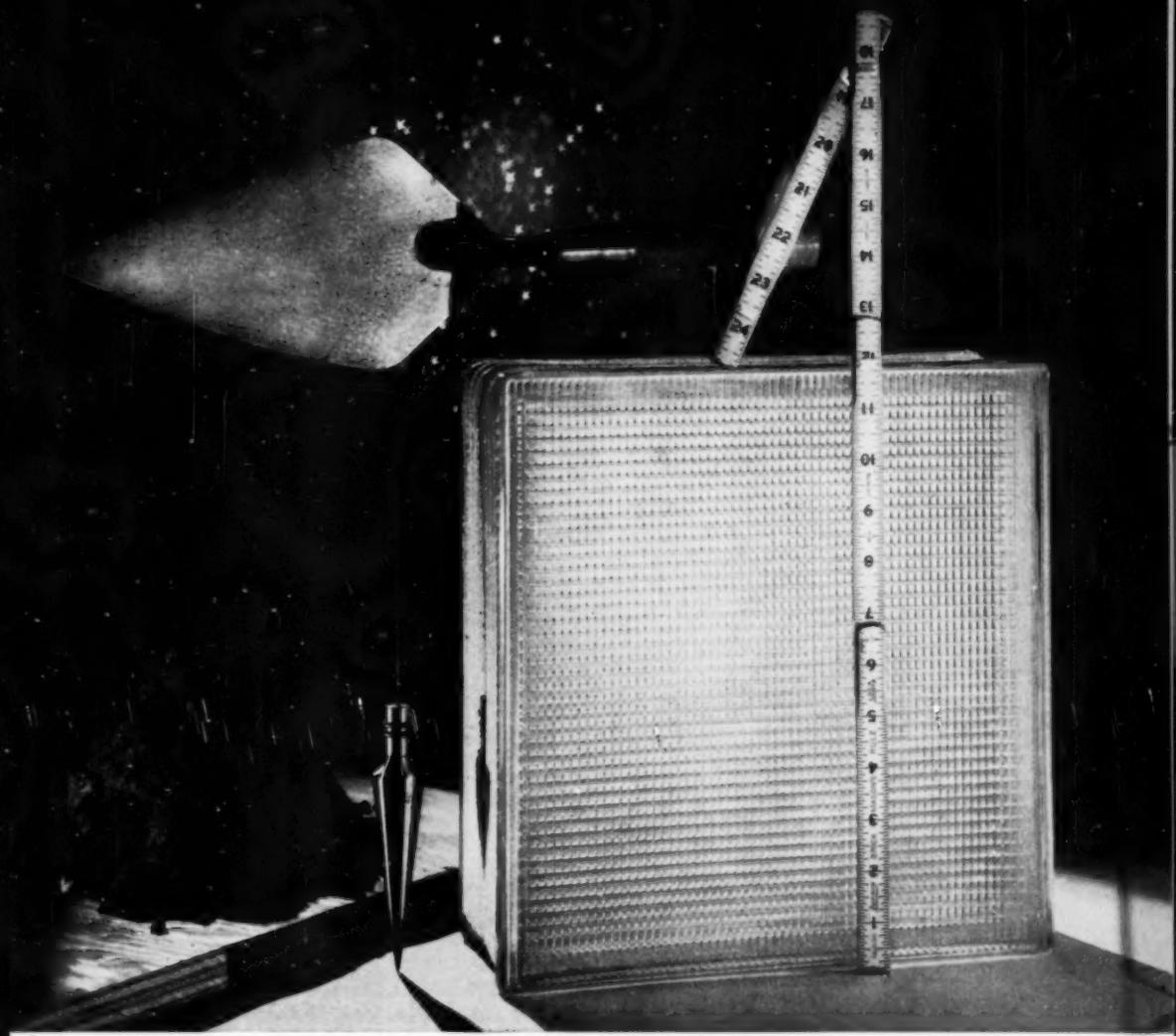
NAMES IN THE NEWS

Dr. John T. Rettaliata, dean of engineering and vice president in charge of academic affairs at Illinois Institute of Technology, has been named president to succeed Henry T. Heald, who resigned to become chancellor of New York University. Dr. Rettaliata will also become president of the Armour Research Foundation and the Institute of Gas Technology, both subsidiaries of Illinois Institute of Technology.



J. T. Rettaliata

Dr. F. F. Hill, chairman of the department of agricultural economics at



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NEWS

Cornell University has been appointed provost of the university, according to an announcement by Deane W. Malott, president of Cornell. He took office on February 1.



W. S. Carlson

Dr. William S. Carlson, president of the University of Vermont, has been elected president of the State University of New York, according to an announcement

by Dr. Oliver C. Carmichael, chairman of New York's board of trustees. Dr. Carlson will assume his new duties April 1. He succeeds Dr. Alvin C. Eurich, who resigned last September to become vice president in charge of the Ford Fund for the Advancement of Education.

Robert L. Lincoln, executive director of the New York City Y.M.C.A. schools branch, has been elected president of Walter Hervey Junior College, New York City. The college is one of the five educational units operated by the Y.M.C.A. in the city.

Martin E. Gormley, a staff member of Yale University's development office, was recently appointed assistant to the president of Sarah Lawrence College, Bronxville, N.Y. He will be responsible for directing a program designed to strengthen the resources of the college.

Paul M. Douglas, a member of the public relations department of General Foods Corporation of New York since 1949, has been appointed assistant to the president of Oberlin College, Oberlin, Ohio, in the field of public relations and promotion. He assumed his new duties on February 1.

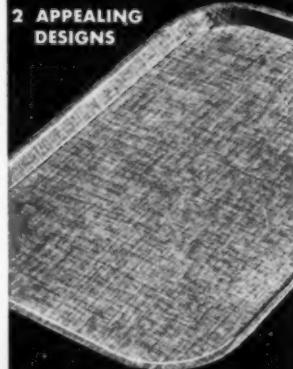
Donald E. Dickason, director of non-academic personnel at the University of Illinois, has been appointed director of the University Civil Service System of Illinois. He will continue in his post at the university, however. The new university civil service system covers the nonteaching staffs of all state supported institutions of higher education within the state.

John Grier Holmes, assistant to the president of Sarah Lawrence College,

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has been appointed secretary of Vassar College, Poughkeepsie, N.Y. He will take up his new duties in April.



W. C. Langsam

Dr. Walter C. Langsam, president of Wagner Lutheran Memorial College on Staten Island, New York, has been elected president of Gettysburg College in Gettysburg, Pa. He

will assume the duties of his new office on July 1, when he succeeds the Rev. Dr. Henry W. A. Hanson, who has been president of Gettysburg College since 1923.

Mrs. Richard Wincor, program director and administrative secretary to the president of Finch Junior College, New York City, has been named assistant to the president, Dr. Roland R. DeMarco.

Paul L. Johnson, dean of Norfolk Junior College, Norfolk, Neb., has

been named to the presidency of Jacksonville Junior College, Jacksonville, Fla.

Dr. Richard A. Harvill, former dean of the college of liberal arts of the University of Arizona, was recently inaugurated president of the university. He joined the university staff in 1934 as an assistant professor of economics.



R. A. Harvill

John T. Barnett, assistant to the president and director of public relations at Butler University, Indianapolis, was recently named treasurer of the university. He assumed his new duties February 1 when he succeeded Richard T. James, who resigned recently to become secretary-manager of the Hoosier Motor Club.

Dr. Oran C. Woolpert, director of the army's research center in biological warfare, has been appointed executive director of the Ohio State University Research Foundation. The new appointment became effective February 1 when he succeeded Dr. James S. Owens, who resigned December 31.

Dr. Clark Kerr, director of the Institute of Industrial Relations at the University of California since 1945, has been named chancellor of the Berkeley campus of the University of California. He will serve on the Berkeley campus as the counterpart of Dr. Raymond B. Allen, former president of the University of Washington, who was elected last month to the chancellorship of the Los Angeles campus. Both chancellors will serve under Robert G. Sproul, president of the University of California.

Elliott B. Earnshaw, bursar of Wake Forest College, Wake Forest, N.C., and a former president of the Eastern Association of College and University Business Officers, died January 3.

Dr. A. Chesley York, president of Calvin Coolidge College of Liberal Arts and of Portia Law School, Medford, Mass., died January 10. He was 67 years old.

Rev. E. Clyde Xander, former president of Thiel College, Greenville, Pa., died January 1 at 65 years of age.

Rev. Dr. Paul J. Hoh, president of Lutheran Theological Seminary, Philadelphia, died January 20 at the age of 58. He had been president since 1945.

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Finest all-weather surfaces in tennis make playing more enjoyable, and *protect your investment*. For resurfacing of old courts—LAYKOLD products are easily applied at low cost.

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Providence 14, R. I. Perth Amboy, N. J. Baltimore 3, Md. Columbus 15, Ohio
St. Louis 17, Mo. Mobile, Ala. Baton Rouge 2, La. Tucson, Ariz. Inglewood, Calif.
Oakland 1, Calif. Portland 7, Ore. Seattle, Wash. Washington 6, D. C. San Juan 23, P. R.

you can always

be sure

Von Duprin

puts **QUALITY** first of all!

Consider the Von Duprin A²—the very finest rim type exit device. All drop-forged bronze. Double-acting crossbar—X-Bar reinforced!

● Decade after decade, Von Duprin has put *quality* first in the manufacture of fire and panic exit devices. Even now, with more and more materials going for defense, there will be no compromise in quality—or workmanship.

In view of the current material restrictions, you can expect a reasonable delay between the time your order is placed and when it is delivered. For this reason, we suggest you advise us of your needs as soon as they are anticipated. We will process each order as quickly as we can. *But we will never sacrifice safety, merely to satisfy speed!*

This is our promise to you . . . and with it, your assurance that every Von Duprin device will always provide rapid, dependable exit . . . "The Safe Way Out!"

Don't "bargain" in human life. Specify only Von Duprin.



FOR ACCIDENT HAZARD



LET YOUR VON DUPRIN "EXIT ENGINEER" SHOW YOU "THE SAFE WAY OUT!"—Von Duprin "Exit Engineers"—factory representatives and contract hardware distributors—are located for your convenience in key cities across the nation. Each has the engineering and hardware experience to aid you in your exit planning. Each has all the facts on Von Duprin devices and accessories to save you time on specifications. Get acquainted with the Exit Engineer in *your* area—consult him on all of your exit problems. For his name, write:



VONNEGUT HARDWARE CO.
VON DUPRIN DIVISION, INDIANAPOLIS 9, IND.

DIRECTORY OF ASSOCIATIONS

National Federation of College and University Business Officer Associations

President: Jamie R. Anthony, Georgia Institute of Technology; vice president: James M. Miller, University of California, Berkeley; secretary-treasurer, Irwin K. French, Middlebury College.

Association of College and University Business Officers

Central Association

President: Laurence R. Lunden, University of Minnesota; secretary-treasurer: C. C. De Long, University of Illinois.

Convention: April 20-22, 1952, Ohio State University, Columbus.

Eastern Association

President: Charles H. Wheeler III, University of Richmond; secretary-treasurer, Irwin K. French, Middlebury College.

Southern Association

President: Gladys Berger, Lenoir-Rhyne College; secretary-treasurer: Gerald D. Henderson, Vanderbilt University.

Convention: April 3-5, Clemson College, Clemson, S.C.

Western Association

President: Nelson Wahlstrom, University of Washington; secretary-treasurer: James M. Miller, University of California, Berkeley.

Convention: May 11-13, Mapes Hotel, Reno, Nev.

American Association

President: Glenwood E. Jones, Shaw University; secretary: L. H. Foster Jr., Tuskegee Institute.

Convention: May 4-6, Kentucky State College, Frankfort, Ky.

Association of College Unions

President: Frank Kuenzel, University of Michigan; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: April 23-26, Oklahoma A. & M. College, Stillwater, Okla.

Association of Physical Plant Administrators of Universities and Colleges

President: Walter W. Kraft, University of Oklahoma; secretary-treasurer: A. F. Galliher, University of Wisconsin.

Convention: May 1952, University of Michigan.

American College Public Relations Association

President: Stewart Harrel, University of Oklahoma; secretary-treasurer: James W. Armsey, Illinois Institute of Technology, Chicago.

College and University Personnel Association

President: B. W. Ames, University of Florida; secretary-treasurer: Fred Doderer, State University of Iowa.

Convention: July 1952, Minneapolis.

National Association of College Stores

President: George Racine, Northwestern University; executive secretary: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

Convention: April 22-25, Miami, Fla.

National Association of Educational Buyers

President: Jamie R. Anthony, Georgia Institute of Technology; executive secretary: Bert C. Ahrens, 1461 Franklin Ave., Garden City, N.Y.

Convention: May 7-9, Washington, D.C.

National Association of College and University Housing Officers

President: S. Earl Thompson, University of Illinois; vice president: Kenneth D. Lawson, Michigan State College; secretary: Ruth Donnelly, University of California.

Convention: August 4-6, University of California, Berkeley.

NEWS

Increase Allocations of Critical Materials

WASHINGTON, D.C. — Ralph S. Trigg, deputy administrator for program and requirements, Defense Production Administration, on January 11 announced allocations of steel, copper and aluminum to the various claimant agencies for the second quarter of 1952. The Office of Education, Federal Security Agency, as claimant agency for schools, colleges and libraries, will have available 128,000 tons of steel toward meeting second quarter construction requirements.

This is an increase of approximately 15,000 tons over the amount of steel finally made available in the first quarter. Of the 128,000 ton allocation, D.P.A. earmarked 110,000 tons for elementary and secondary school construction, and 18,000 tons for higher education and libraries.

The steel allotments will support about 241 projects now under way in the field of higher education and libraries, and will permit 19 new starts, primarily medical schools and research laboratories.

CLASSIFIED ADVERTISING

POSITIONS WANTED

Librarian-Head-Man—Graduate library school and M.A. Degree, some Ph.D. work; experienced head of active college library, now employed; knowledge of building planning, audio-visual services, library instruction; desires position as head librarian outstanding liberal arts college or university; \$6000. Write Box 72, COLLEGE AND UNIVERSITY BUSINESS.

Business Manager—Presently employed in eastern college; master's degree in Business Administration; specialist in finance, investments, fund raising; fifteen years' experience in field of education; capacity for intensive work and loyalty; available June first. Write Box CW 75, COLLEGE AND UNIVERSITY BUSINESS.

POSITIONS OPEN

Boskkeeper-Accountant—New Jersey engineering college needs man with institutional ac-

ounting experience; help with posting, statements, budgets, payrolls. Write Box CO 64, COLLEGE AND UNIVERSITY BUSINESS.

Salesmen—To handle wooden furniture line of dormitory and dining room furniture for living quarters of students at universities and colleges; territory to be central states; kindly submit complete qualifications, references, etc. Write Box CO 65, COLLEGE AND UNIVERSITY BUSINESS.

Superintendent of Buildings and Grounds—Large eastern university is seeking man with adequate experience to be in charge of maintenance and upkeep of 178-acre campus and 20 buildings; professional engineer preferred, but not absolutely essential; write fully concerning experience, references, and salary needed; position open in June, 1952. Write Box CO 66, COLLEGE AND UNIVERSITY BUSINESS.

University Engineer—Permanent position in large, southeastern university for civil engineer; good position for qualified engineer with a good personality. Write Box CO 62, COLLEGE AND UNIVERSITY BUSINESS.

*The rates for classified advertisements are: 10 cents a word; minimum charge, \$2.50.
Forms close 25th of month preceding date of issue.*

*Address replies to
COLLEGE AND UNIVERSITY BUSINESS
919 N. Michigan Avenue, Chicago 11, Ill.*

COLLEGE and UNIVERSITY BUSINESS

Cheerful, Friendly Furniture That Adds New Charm in

LOUNGES . . .

**RECEPTION
ROOMS . . .**

CLUB ROOMS



BUTTERSCOTCH*

Here is truly friendly furniture that helps create a home away from home. Warm and appealing, Sikes BUTTERSCOTCH is beautiful in its rugged simplicity . . . the ideal choice for dormitories, reception rooms or clubs. It is reasonable in initial cost and helps keep maintenance at a minimum. It withstands years of constant use and cleaning . . . acquires added beauty

gracefully with age. Rounded corners and edges, sturdy drawer pulls,

reinforced hand-pegged joinery all contribute to long life with little upkeep. Write Sikes for folders Nos. BS-1 and BS-2 which give complete details on this fine, versatile line. Be sure to state use you have in mind.



SIKES furniture

FOR DORMITORIES, DINING ROOMS, LIBRARIES,
CLASSROOMS, OFFICES, RECEPTION ROOMS, CLUBS

THE SIKES COMPANY, INC.

• 32 CHURCHILL STREET

• BUFFALO 7, N. Y.

Vol. 12, No. 2, February 1952

*BUTTERSCOTCH is a registered trademark of The Sikes Company, Inc.





Classroom, New York University Law Center. Architects: Eggers & Higgins, New York; Contractor: John Lowry Company, New York

American Universal Angle Tables enable all students to see instructor

New American Universal Angle Tables and Pedestal Chairs combine to offer advantages not found in any other lecture-room furniture. They are earning the praise of college and university authorities because:

1. All students can see the instructor.
2. The instructor can see all students.
3. Cleaning around pedestals is easy and fast.
4. Fixed-to-floor pedestal chairs avoid cluttering passageway between tables.*
5. Swivel chair provides greater freedom to perform, plus easy ingress and egress.

American Universal Angle Tables and Pedestal Chairs are equally suitable for large or small lecture rooms, with or without floor risers. Angles of the table can be adapted to any radius. Offset steel table-pedestals afford ample leg room. Table-tops are of urea-resin-bonded plywood, durably lacquered in natural light finish. Tables are 29" high, in widths from 16" to 24", and in lengths as desired; available with book-compartment under top, if desired.

Write for complete information.

*Also furnished with automatic fore-and-aft adjustment to seat, at slight additional cost.

Pedestal Chair No. 406

Cradleform posture seat has deep-curved back with self-adjusting lower back support which offers the greater freedom to perform. Seat swivels 45° either way, reducing body torque for right or left hand and eye preferences. Height adjustable from 14" to 17". Baked-enamel finish on all metal parts.



WORLD'S LEADER IN PUBLIC SEATING

American Seating Company

Grand Rapids 2, Michigan

Branch Offices and Distributors in Principal Cities

Manufacturers of School, Auditorium,

Church, Theatre, Transportation, Stadium Seating, and Folding Chairs

YOUR JANITOR

... his TIME and TROUBLES
are important to you!



This janitor is putting 500 MOSINEE Towels into a SENTINEL cabinet. This saves him time and trouble... because the Sentinel's 500-towel capacity, plus the fact that 25% to 50% fewer towels will be used (due to the Sentinel's "control" on towel consumption and reduction of waste), mean fewer janitor service-trips. Less work... better service to users... lower cost to schools.



BAY WEST PAPER CO.

Green Bay, Wisconsin

A Division of Mosinee Paper Mills Co.
Member of National School Service Institute

MOSINEE

Sulphate Towels

PREP-TOWLS • ZIP-TOWLS • TRIM-TOWLS
TURN-TOWLS • ROL-TOWLS • BATH-TOWLS

"Come into court with CLEAN HANDS!"



Lawyers' Classroom Building, Southern Methodist University. Architect—Mark Lemmon, Dallas; General Contractor—Henger Construction Co., Dallas; Plumbing Contractor—C. Wallace Plumbing Co., Dallas.

That's page one, rule one in every law school textbook.

And to practice—literally—what they teach and preach, leading law schools, as well as other colleges and universities, choose Crane, the preferred school plumbing.

If you're building today for the years ahead, jot these facts about Crane fixtures in your "brief" on plumbing:

Durability—decades of students to come will use the Crane fixtures you specify today.

Ease of Maintenance—smooth, glistening surfaces—easy to clean.

Ease of Servicing—exclusive Crane *Dial-eze* and Magi-close faucets (with the renewable cartridge) give longer life, reduce wear.

Talk it over with your architect and contractor—and let them know your preference for Crane.



CRANE NORWICH lavatories
as installed at Southern Methodist University.

CRANE CO.

GENERAL OFFICES: 836 SOUTH MICHIGAN AVE., CHICAGO 5
VALVES • FITTINGS • PIPE
PLUMBING AND HEATING

"Is it too late, Doctor?"



Fortunately, it's *not* too late for more and more Americans who are going to their doctors *in time*...at the first sign of any one of the seven danger signals which *may* mean cancer: (1) any sore that does not heal (2) a lump or thickening, in the breast or elsewhere (3) unusual bleeding or discharge (4) any change in a wart or mole (5) persistent indigestion or difficulty in swallowing (6) persistent hoarseness or cough (7) any change in normal bowel habits.

By showing Americans what they can do to protect themselves and their families against cancer, the American Cancer Society is saving thousands of lives *today*. By supporting science and medicine in the search for the causes and cures of cancer, the Society hopes to save countless more *tomorrow*. To guard yourself, and those you love, against cancer, call the nearest office of the American Cancer Society or address your inquiry to "Cancer" in care of your local Post Office.

American Cancer Society



MODERNIZE YOUR
BATHS WITH



Weisway
CABINET SHOWERS

QUALITY
BUILT
RIGHT
DOWN
TO THE
BOTTOM



Trouble-free service, plus the finest in shower bathing facilities, are provided by Weisway Cabinet Showers. Guaranteed leakproof . . . Weisway's exclusive porcelain enamel receptor with textured Foot-Grip, No-Slip floor is safe, sanitary, positively non-absorbent and easy to keep spotlessly clean. Easily installed without special treatment of building walls or floor. Weisway quality ends the trouble and cost of frequent repairs and replacements. For lasting satisfaction and service, specify Weisway Cabinet Showers. Write for detailed information.

HENRY WEIS MANUFACTURING CO., INC.
237 Weisway Building Elkhart, Indiana

What's your score
on this
Monosodium Glutamate

Quiz?

TRADE MARK OF THE LARGEST PRODUCER OF
PURE MONOSODIUM GLUTAMATE IS AC'CENT.

1 Yes. Ac'cent is pure (99+%) monosodium glutamate in crystalline form produced solely from cereal or vegetable sources. Ac'cent is a basic seasoning—it brings out natural flavors of many foods.

2 DOES AC'CENT ADD FLAVOR TO FOOD?
No. Ac'cent adds no flavor, color or aroma of its own to foods. Its sole function is to *make good food taste better* by intensifying weak or depleted flavors, also by reviving natural flavor which may be lost through storage, cooking, or delayed serving.

3 AC'CENT IS AS EASY TO USE AS SALT.
Yes. Ac'cent, known as the "Third Shaker," is used with salt, and in most dishes to which salt is added . . . meats, poultry, fish, vegetables, gravies, creamed and casserole dishes, stews, etc.

4 AC'CENT IS AN ECONOMICAL PRODUCT.
Right you are! For a fraction of a cent per serving, Ac'cent makes low-cost dishes more appetizing, hence more appealing and popular.

5 AC'CENT IS PRACTICAL TO USE IN ALL
FOOD OPERATIONS.

Yes. Wherever good food is served—restaurants, hotels, hospitals, schools, industrial plants—Ac'cent can be added to any large-quantity food formula with little or no change in basic proportions.

6 AC'CENT WILL HELP SOLVE MANY FOOD
SERVICE PROBLEMS.

True. Ac'cent builds up the taste of bland foods, brings out natural food flavors, complements other seasonings, combats steam table fatigue, retains natural flavors longer, solves the "leftover" problem by reactivating depleted flavors.

Is more information about Ac'cent available?

You bet. Just write AMINO PRODUCTS DIVISION
International Minerals & Chemical Corp., 20 N. Wacker Dr., Chicago 6, Ill.

Ac'cent®
PURE MONOSODIUM GLUTAMATE

...makes
good food
taste better!





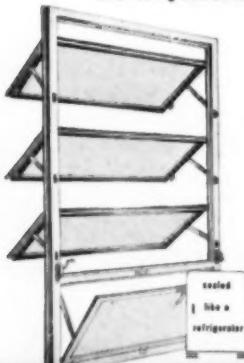
"Teacher made me sit near the windows yesterday."

Poor little tyke...not even a grown-up can safely cope with the dangers of drafty windows. In either case, it is so unnecessary...drafty, poorly weatherstripped windows are as old-fashioned as the "dunce cap"!

AUTO-LOK Windows are the modern, sensible answer. With AUTO-LOK Windows you need not sacrifice healthful room-comfort to provide light from a wall of windows. With AUTO-LOK Windows you eliminate the "danger zone" alongside the window wall!

TIGHTEST CLOSING WINDOWS EVER MADE

Let AUTO-LOK cut your heating and air-conditioning costs year after year. When AUTO-LOK Windows are closed, they are literally sealed shut like the door of a refrigerator, reducing air infiltration to a degree heretofore believed impossible. Cuts heating and air-conditioning costs to a minimum!



"NO-DRAFT" VENTILATION...When AUTO-LOK Windows are open...entering air is always scooped inward and upward...leave the vents open even when it is raining...the rain can't enter, but fresh air will.

NO MAINTENANCE PROBLEMS...Friction-free AUTO-LOK hardware requires no attention or adjustments...ever. For the life of your school, opening or closing of AUTO-LOK Windows is as free and easy as the first opening or closing. They never stick...never rattle. They are easy to clean...all from the inside...top vent, too.

AUTO-LOK ENGINEERING SERVICE is readily available to serve you in every way possible. Architects and designers all over the country call on Ludman's Engineering Service to assist in window planning...and, this service is yours, too...for the asking.

Eliminate
THIS DANGER ZONE

with
Auto-Lok
PATENTED
THE *perfect* WINDOW
FOR SCHOOLS

WRITE TODAY FOR OUR BOOKLET
"WHAT IS IMPORTANT IN A WINDOW?"

This outstanding booklet on windows answers many questions regarding the selection of the right window for any type of building...write for it today. Dept. CU-2.

Auto-Lok
AUTOMATIC
LOCKING
ALUMINUM WINDOWS
ALSO AVAILABLE IN WOOD

LUDMAN CORP., P.O. Box 4541, Miami, Florida

LUDMAN LEADS THE WORLD IN WINDOW ENGINEERING!

WHAT'S NEW

February 1952

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 84. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Automatic Ice Cube Maker



The new Frigidaire Ice Cube Maker is completely automatic in operation and is designed to manufacture up to 5000 clear, solid ice cubes in a 24 hour period. Cubes are made by a continuous stream of circulating water flowing over a refrigerated freezing plate. When the slab of ice is built up, hot refrigerant gas releases it from the plate so that it slides onto a cube cutting grid containing low voltage electrically heated wires which cut the sheet into solid, dry cubes. They drop into the storage bin below and are ready for use.

The cube storage bin has an insulated door on the front left side of the cabinet. The inside front of the bin pulls out and down in a manner to bring the cubes forward for quick and easy removal. Fibrous glass insulation of the storage cabinets keeps the cubes at a temperature to prevent melting or sticking together.

The compact, all steel cabinet of the ice cube maker was styled by Raymond Loewy and is table height to fit into corners or under counters. It is 44 $\frac{1}{4}$ inches long, 31 $\frac{1}{2}$ inches wide and 38 $\frac{1}{2}$ inches high. The exterior is finished in gray dulux with a black acid-resistant porcelain-finished top. The interior of the cabinet is finished in lifetime porcelain. **Frigidaire Division, General Motors Corp., Dept. CUB, Dayton 1, Ohio.** (Key No. 378)

All Purpose Cleaner

The new West All-Purpose Cleaner combines the advantages of an all vegetable oil soap with those of a synthetic detergent and an alkaline polyphosphate water softener. It produces very good foam and excellent detergency and is formulated for efficient action in hard water as well as soft, either hot or cold, and with savings in time and labor. It is designed for practically any cleansing

operation, including scrubbing, mopping and washing all types of floors, woodwork, painted walls, windows and other surfaces. It is economical in use, is prepared in relatively high dilutions, and when stronger concentrations are required for cleaning particularly dirty areas, it is said to be harmless to surfaces while doing its work effectively. **West Disinfecting Co., Dept. CUB, 42-16 West St., Long Island City 1, N.Y.** (Key No. 379)

Photocopy Machine

A new machine has been developed to produce dry photocopies almost instantly. The Auto-Stat is based on a new



principle of instant and automatic developing and fixing. No training or special skill is required to produce clear black and white copies of any original.

The new method is fast and simple, a finished copy being produced in less than thirty seconds. The unit is compact and occupies no more space than a typewriter. It is extremely flexible with no limitations as to type of papers, documents or originals that can be copied, regardless of whether the original is printed on one or both sides or on opaque or translucent paper. The unit is designed to handle letter and legal size copies as well as larger copies up to 11 by 17 inches. The machine is smartly styled and has a gray hammerloid and black wrinkle finish. It is sturdily constructed of stainless steel. **American Photocopy Equipment Co., Dept. CUB, 2849 N. Clark St., Chicago 14.** (Key No. 380)

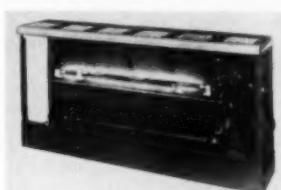
Water Treatment Process

The new Sola Catalytic Process for the treatment of water does not change the chemical structure of water in any way, but by the use of a catalyst in hermetically sealed cells, it stops the formation of new scale and gradually removes all old existing scale. It also reduces corrosion to a minimum. Other benefits of the process include elimination of odors by chlorination, and the elimination of the need for dosing, periodic analysis and control. The process is designed for use in boilers, air conditioning and cooling systems, gas and diesel engines and all types of water systems. It is available in various models for any type and size of application. **Sola Catalytic Co., Dept. CUB, 520 Browder St., Dallas 1, Texas.** (Key No. 381)

Germicidal Lamp in Ventilator

All models of Herman Nelson Unit Ventilators are now available with germicidal lamps as an integral part of the equipment. The use of germicidal lamps with unit ventilators is the result of extensive, coordinated research and testing by engineers of Herman Nelson and scientists of General Electric Company. They are offered as a means of further protecting health, since tests have indicated that the lamps have a high bactericidal kill.

The germicidal lamps are available as accessory equipment on the recently introduced Draft Stop System of Unit Ventilation as well as on all Herman Nelson General Purpose Unit Ventilators. The bacteria killing equipment is designed to help reduce the spread of



respiratory and other infections in crowded classrooms. **Herman Nelson Division, American Air Filter Co., Inc., Dept. CUB, Moline, Ill.** (Key No. 382)

(Continued on page 74)

WHAT'S NEW...

Dry Chemical Extinguisher

Very light weight and maneuverability are features of the new stainless steel 20 and 30 pound capacity dry chemical fire extinguishers. The maneuverability of the new models permits the operator to reach the seat of the fire without any lost motion. The extinguisher is operated by finger tip control which shoots a chemical heat insulating cloud up to 20 feet, snuffing out flames on contact, even at long range. The chemical used in the new extinguisher produces 1100 times its volume in non-toxic, flame-killing gas. The new unit gives protection against class B and C fires and the company reports it is Underwriters' Laboratories approved. **The Buffalo Fire Appliance Corp., Dept. CUB, Dayton 1, Ohio.** (Key No. 383)

Swivel Arm Chair

The new No. 1033 swivel arm chair has an all-welded aluminum frame for strength. It is completely anodized to withstand hardest usage in all climates. The feather-touch adjustment allows easy changing of the seat and back positions for individual comfort. The aluminum base is equipped with ball bearing, free turning casters molded into the base to prevent falling out when the chair is

lifted. The seat and back pad are of foam rubber with perforated crack and tear resistant plastic upholstery which is



available in a wide choice of colors. **Emeco Corporation, Dept. CUB, Hanover, Pa.** (Key No. 384)

Luxtrol Lighting Control

The Luxtrol System of lighting control consists of one or more miniature positioner stations controlling one or more motor-driven Powerstat Dimmers. This enables the placing of the control stations at preferred locations with the actual dimming equipment in any convenient space. Lights can be dimmed,

brightened or blended with finger-tip operation of a small hand lever.

The motor-driven Powerstat Dimmers may be pre-set to dim or brighten the lights at the required time. Each miniature dimmer station is marked with graduations to permit the desired degree of illumination intensity. The system can be adapted to any lighting application and any number of positioner control stations can be installed to control any number of motor-driven Powerstat Dimmers. **The Superior Electric Co., Dept. CUB, Bristol, Conn.** (Key No. 385)

Small Utility Lamp

A new portable fluorescent lamp is now available which is very small but produces intense, cool illumination of up to 450 foot candles of light. It contains two 4-watt fluorescent tubes and all components within a 2 by 6 inch drawn shade. The jackknife support bracket contains three adjustable links, each three inches long. It may be removed from the cast base for permanent installation on a desk, table or machine. Swivel joints are provided at each joint as well as in the head and base to allow adjustment to any position. **Stocker & Yale, Inc., Dept. CUB, Marblehead, Mass.** (Key No. 386)

(Continued on page 76)

**HOW TO GET A+
FOR MAINTENANCE**
... use McDougall-Butler
long life quality finishes



A COMPLETE SYSTEM OF INTERIOR AND EXTERIOR
SPECIALIZED PAINTS, VARNISHES AND ENAMELS.

Preferred by hundreds of leading educational institutions.

It takes a wide variety of paints, varnishes and enamels to keep the modern institution "ship shape." But it takes more than variety. It takes quality materials, skillfully blended by experienced paint makers to give you the right finish for every purpose. McDougall-Butler finishes are right for the job! That means finest appearance, true colors, long life and resultant lower maintenance costs.



Makers of Fine Finishes
Since 1887

DO YOU HAVE YOUR COPY OF McDougall-
Butler TECHNICAL BULLETINS?

Answers to hundreds of maintenance problems involving paints. Send
for this and McDougall-Butler color cards today.



McDOUGALL-BUTLER CO., Inc.
BUFFALO 14, NEW YORK

Sanibag Service

Offers Women the BETTER WAY to Dispose of Sanitary Napkins

WOMEN PREFER

the SANIBAG method of disposing of sanitary napkins. Once introduced to Sanibag, they accept it as the quickest, easiest and most discreet disposal method. Discomfort and personal distress can be among the greatest enemies of successful learning.

EASY ON PLUMBING

Sanibags reduce embarrassing toilet stoppages that too often occur in women's favorities. In fact, Sanibag service costs so little that it pays for itself many times over in reduced plumbing bills and washroom maintenance. Used by hundreds of schools, dormitories and sororities.

Why not investigate the advantages of Sanibag now?

Send for free samples and descriptive information. When you write, please include your washroom supply merchant's name and address.

Buy from your
Bain & Company

409 SOUTH GREEN STREET
CHICAGO 7, ILLINOIS

Show Films Easier...



with Amazing RCA "Thread-Easy Projector"

With this new RCA projector, you can actually thread the film in only 30 seconds. Thread it while you're lecturing. Thread it in the dark. Even a child can thread it. It's that simple.

Every operation easier with RCA "400"

Here is a 16mm sound projector so easy to use that a 12-year-old child can be the projectionist. So simple you can set it up with pictures and sound on the screen in only 2 minutes.

Easy to pack up, too. Takes only 3 minutes to pack up the Junior model. And easy to carry. Single-case Junior weighs only 33½ lbs. Women appreciate its narrow case, rounded corners, proper balance.

Schools Prefer the RCA "400"

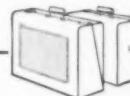
In a single purchase, Pennsylvania schools bought 572 RCA "400's". Baltimore schools bought 156. Washington, D. C., schools bought 81. Already many thousands of RCA "400's" are in schools . . . making film projection easier . . . for busy teachers just like you.

Operate it! Convince yourself!

If you use 16mm film in your teaching, *you owe it to yourself* to find out about this revolutionary easy-to-use projector. The new "Thread-Easy" design is the culmination of 23 years of RCA research—research which gives you such outstanding ease of operation, plus a brilliant picture and superb sound.



RCA "400" Junior. Handsome blue-green spatter finish. Single case weighs 33½ lbs. 7-watt amplifier, 8-inch speaker. Excellent for medium to large rooms.



RCA "400" Senior. Has 10-watt amplifier, 10-inch speaker. Projector case weighs 36½ lbs. Speaker case weighs 26 lbs. Excellent for larger rooms, auditoriums.

MAIL COUPON FOR MORE DETAILED INFORMATION

Educational Services, Dept. 34B
Radio Corporation of America, Camden, N. J.

Please send me complete information
on the RCA "400" Projector.

Name. _____

School. _____

Street. _____

City. _____ State. _____



RADIO CORPORATION of AMERICA

EDUCATIONAL SERVICES,

CAMDEN, N.J.

WHAT'S NEW . . .

Silex Coffee Warmer

A new two-unit coffee warmer has been added to the Silex line. The new unit is compact and the enclosed elements are easy to keep clean. It is 14 inches long, 5 1/4 inches deep and 3 1/4 inches high, taking up a minimum of space. Each burner uses only 100 watts so that the WS-2 can be plugged into any ordinary electrical outlet. The Silex Co., Dept. CUB, 88 Pliny St., Hartford 2, Conn. (Key No. 387)

Portable Tape Recorder

The Magnemite is a battery-operated portable tape recorder playback unit embodying features recommended and approved in a survey among schools and other agencies. It weighs only 9 1/4 pounds and measures 11 1/2 by 8 1/2 by 5 1/2 inches in size. It is the result of three years of development and provides extreme clarity of speech. The high gain amplifier requires no preliminary warm-up and will pick up a normal speaking voice 100 feet from the microphone.

The special noiseless and vibrationless spring wound motor will run 15 minutes on a single winding and may be rewound during operation. The Magnemite operates from self-contained dry

batteries that last 100 hours without replacement. Two hours of recording time can be accommodated on a single 5 inch reel of standard 1/4 inch wide



sound recording tape which can be reused indefinitely. Playback is accomplished through crystal earphones. An external power amplifier and speaker may also be connected to the output terminal. It is contained in an attractive two-tone leatherette covered case and can be operated anywhere and in any position, as well as in motion. Amplifier Corp. of America, Dept. CUB, 398 Broadway, New York 13. (Key No. 388)

(Continued on page 78)



Wave goodbye to locker problems
... install DUDLEY LOCKS



Master-Keyed
P-570



Master-Charmed
RD-2

You're through with locker problems—delays, "cutoffs"—the day you equip your school lockers with dependable Dudley Locks. No budget problem, either, if you use the Dudley Self-Financing Plan. Write for details and free Catalog Folder.

**DUDLEY LOCK
CORPORATION**

DEPT. 222, CRYSTAL LAKE, ILLINOIS

The finest of Master Keyed padlocks, with the extra security of the Dudley Master Key that can't be duplicated on ordinary key cutting machines.

Plastic Tape for Blinds

Flexalum plastic tape for venetian blinds is now being made available in package form, each package containing sufficient tape for the average two-tape blind. Step-by-step instructions will be included to show how easily the tape can be installed.

The new plastic tape is easily wiped clean with a damp cloth, does not stain or discolor, is available in many attractive colors and does not fade. It is durable and dependable and does not stretch, crack or shrink. Hunter Douglas Corp., Dept. CUB, 150 Broadway, New York 7. (Key No. 389)

Super-Resistant Floors

AWOG floors are scientifically developed to resist such common floor disintegrators as acid, water, oil and grease. The close-knit composition of the product gives it extreme durability and does not permit liquids to penetrate the bonding element. AWOG can be used for repairing broken areas or for complete overlays in floors getting hard usage. It is sanitary and easily cleaned and can be used over brick, stone or wood, indoors or out. Flexrock Company, Dept. CUB, 3620 Filbert St., Philadelphia 4, Pa. (Key No. 390)

magnesium
FOR LIFETIME SERVICE!
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That fold



MODEL 482
MAGNESIUM

Beautifully styled, light, easy to move, upholstered in Naugahyde, bonded rubber cushions. Die-cast Magnesium frames and patented folding mechanism assure great strength for long service.

Look like conventional chairs, but fold compactly for storage.

Ask for catalog showing complete line of wood and Magnesium models.

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Specialists in Dishwashing Products



Salute—another helpful Wyandotte Chemicals product at work

Sensational NEW SALUTE removes and prevents dish stains! Here's proof:

A WYANDOTTE service specialist helped Crowley-Milner, Detroit department store, cure this costly dishwashing headache. On plasticware, china, glasses and silver, SALUTE can help you, too!

Within a few months after putting in plastic service, Crowley-Milner found that ugly stains were a big headache . . . hard to remove, and offensive to patrons. The strong bleach used to cure the stains etched the plastic itself. Sound familiar?

Solved by Wyandotte Salute

Now, on our helpful representative's recom-

mendation, Crowley-Milner uses Wyandotte SALUTE. The result? *Stains removed and further staining prevented, in the normal process of dishwashing, by this complete dishwashing compound!*

"We're confident," says Mr. Robinson, restaurant manager, "that if we'd washed our dishes from the beginning with SALUTE, the original stains never would have appeared. We wouldn't use anything else now. We also find SALUTE excellent for glasses and silver."

This is another case of helpful Wyandotte field service, and supe-

rior Wyandotte products, solving tough problems. To discover how SALUTE, KEEGO®, G.L.X.,* or other Wyandotte products can save you time and money, and do a better job for you, call in a Wyandotte representative. *Wyandotte Chemicals Corporation, Wyandotte, Michigan; also Los Angeles, Calif.*

*REG. U.S. PAT. OFF.



*Helpful service representatives in 88 cities
in the United States and Canada*



Largest manufacturers of specialized cleaning products for business and industry

WHAT'S NEW . . .

Acoustical Tile

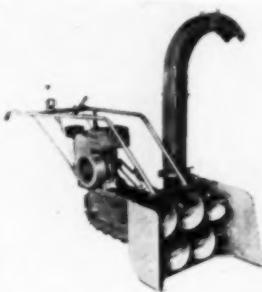
A new Travertone acoustical tile is being introduced for interiors demanding a quiet, dignified air. Called Embossed Travertone, the new tile contains two finely scored parallel bands of different widths across the surface of the tile. It may be used to form interesting patterns in ceiling designs, either by itself or combined with Standard Travertone, and it is easily adaptable for border treatments. Embossed Travertone is made from mineral wool fibers and is rated as an incombustible material by the U. S. Bureau of Standards. Armstrong Cork Co., Dept. CUB, Lancaster, Pa. (Key No. 391)

Power Snow Removers

Two new Trio snow plows have been introduced this winter. The Trio Snow Jet has a 7.7 h.p. engine and is designed to move forward at the desired throttle speed through any depth of snow. It has a 37 inch track and is a rugged, powerful rotary snow plow designed for easy maneuverability. It picks up the snow in a 30 inch swath. Specially designed augers bite into the drifts, scoop up the snow and direct it into the six foot blower spout which is easily swiveled to blow the snow in any desired direction. The plow needs only to be directed by

the operator and the hand clutch and throttle are conveniently placed for fast, smooth operation.

The Trio Rotary Snow Plow is a larger unit designed to fit any tractor



or truck. It has a six foot working span, universal blower spout which blows the snow off in any desired direction, the blower baffle being controlled from the cab or tractor seat, and is designed to move large quantities of snow quickly. The snow plows are manufactured by Trio Manufacturing Co., Minneapolis, for distribution by Dahlman Equipment Sales Co., Dept. CUB, 500 N. Prior Ave., St. Paul 4, Minn. (Key No. 392)

(Continued on page 80)

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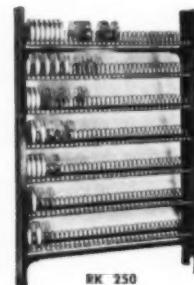
Ideal for School Film Libraries. Seven tiers of Separator Rack holds 250-400 feet 16mm reels. Many models to choose from.

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SEPARATOR
RACK**



RK 250

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VIP is a new cleaner, disinfectant, deodorizer combined in one unit. It combines high quality soaps for fine cleaning without damage to surfaces, and Ortho benzyl para Chlorophenol for thorough deodorizing and disinfecting. The product is economical to use since it can be diluted with water and used effectively in a 1 to 40 solution. VIP is efficient for cleaning walls, floors, or any surface where dirt, bacteria and odors collect, since it cleans in one application. It can also be used for shampooing rugs and carpeting as it kills mildew and prevents the growth of fungi. Hysan Products Co., Dept. CUB, 932 W. 38th Place, Chicago 9. (Key No. 393)

Wet Surface Enamel

Certified Wet Surface Enamel No. 445 has been developed especially as a coating for painting locker and shower room walls. It is adaptable to painting surfaces which are constantly damp and where humidity is constantly high. It is applied directly to clean surfaces which are actually damp at the time of application. The product is available in white and colors. United Laboratories, Inc., Dept. CUB, 16801 Euclid Ave., Cleveland 12, Ohio. (Key No. 394)

Send for this Helpful Bulletin



Here's a great new
Burroughs to speed
your accounting



Never before have educational institutions had the opportunity to mechanize their accounting at such moderate cost—because never before has there been a medium-priced machine so flexible and fast, so easy to operate, as the sensational new Burroughs Sensimatic.

This is the all-new, amazingly versatile figuring tool—the machine with a "mechanical brain" that directs it through every accounting job swiftly, easily, accurately. The Sensimatic makes possible the complete mechanization of all your record keeping work from a single machine.

Investigate now. Learn how the Sensimatic can save dollars, hours and effort . . . how surprisingly little it costs to own. Write for complete information today. Burroughs Adding Machine Company, Detroit 32, Michigan.

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and more**

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Distribution
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General Ledger
Student Accounts
Cost Records
Stores Records

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Burroughs

WHAT'S NEW . . .

Visual Control System

Schedules by days of the week, hours of the day, classrooms or classes can be graphically pictured with the new Boardmaster Visual Schedule Control. Schedules are posted on a metal board by typing or writing on cards and anchoring in grooves to form horizontal and vertical columns. Cards are available in six contrasting colors and may be used for contrast in different groups or time periods. Revisions in schedules are easily made by interchanging the cards on the board. Any type of schedule can be set up to suit requirements. Boards are made of aluminum and come in standard sizes of 24 by 38½ inches. They are hung from two small hooks. **Graphic Systems, Dept. CUB, 55 W. 42nd St., New York 18.** (Key No. 395)

Automatic Projector

A new 1000 watt electrically operated sound slidefilm and filmstrip projector is being introduced. The projector is controlled by an electrical push button, or by connecting it to the DuKane 30/50 automatic 8 watt amplifier and 3 speed turntable for fully automatic sound slidefilm projection. Filmstrips are advanced one frame at a time by the new "synchro-wink" electrical film advance which

changes the picture in one twentieth of a second. The new unit provides large and bright pictures which permit show-



ing of slidefilms in the auditorium as well as in the classroom. **DuKane Corporation, Dept. CUB, St. Charles, Ill.** (Key No. 396)

Rite-On-Green Paint

Slate-like writing surface qualities can be achieved on any clean, smooth and dry surface with the use of Rite-On-Green paint. The paint is easily applied by brush or spray, takes erasing well with an ordinary chalk eraser and can be washed clean without harm to the finish. Inexpensive writing boards can be made with the new Sapolin paint from masonite, plywood, wallboard or metal. One coat of the paint is sufficient

(Continued on page 82)

on most surfaces although two coats give better results on porous surfaces. **Sapolin Paints Inc., Dept. CUB, 229 E. 42nd St., New York 17.** (Key No. 397)

Snow Remover

The new Toro Snow Boy is a rotary plow with snow blower designed to clear a 33 inch path through soft or packed-down snow and to remove 500 cubic yards of snow in an hour. It is highly maneuverable and designed for use on streets, sidewalks, parking lots, skating rinks, playing fields and other areas where snow must be removed.

The Snow Boy has two rotating elements, the milling blades that displace the snow and the ejecting turbine that tosses it aside. It will throw snow 65 feet in any direction desired, thus eliminating high snow banks on each side of a walk or drive. The plow was originally developed, tested and perfected in Switzerland and has been further refined by Toro engineers. It has six forward and two reverse speeds, ranging from one-third to two and three-quarter miles per hour. The wheels have independent clutches for easy turning in small places and the rotary blades have four speeds. **Toro Mfg. Corp., Dept. CUB, 3042 Snelling Ave., Minneapolis 6, Minn.** (Key No. 398)

No other fence provides such long-lasting protection at such low cost per year of fence life. No other fence is made of KO-NIK steel which contains copper, nickel and chromium for greater strength and longer life. And in addition, Continental Chain Link fence is galvanized *after weaving* for extra protection against rust and corrosion. For complete information on this better fence, write Continental at Kokomo, Indiana.

*Due to present National Defense requirements for nickel and chromium, two critical war materials, Continental Fence at present is available in Copper Steel only.



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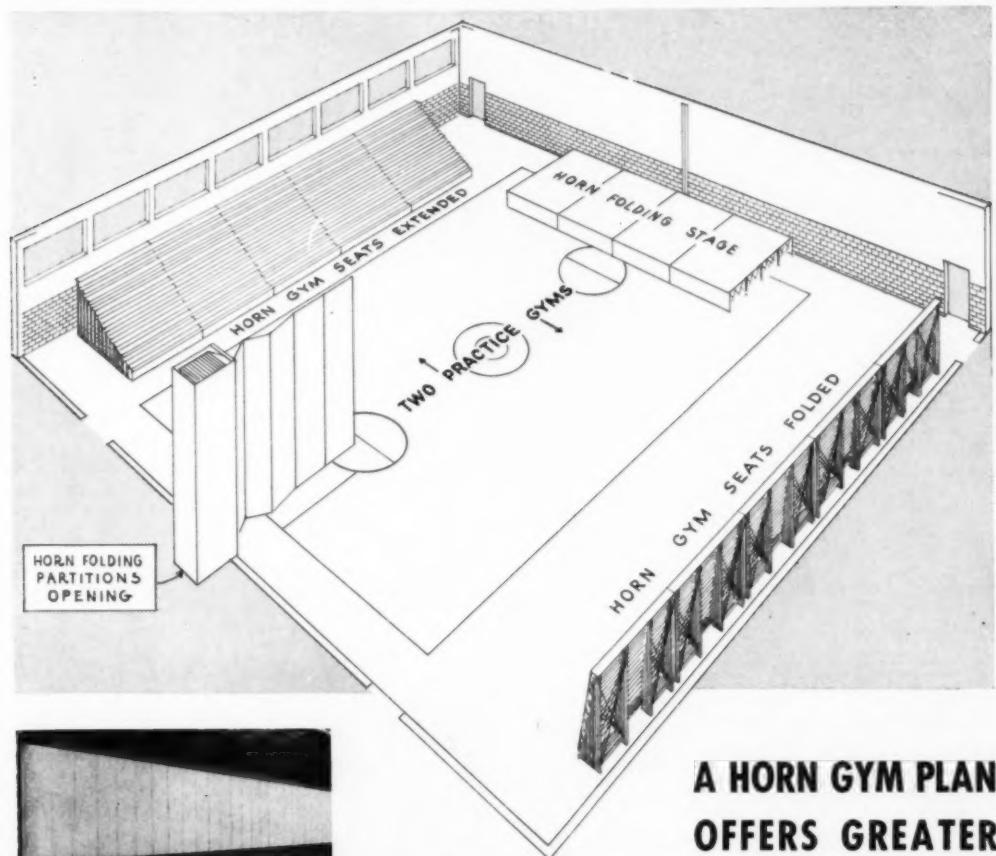
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No. 356

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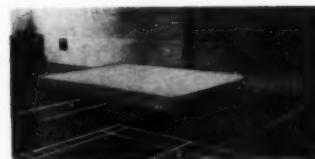
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Save time, labor and space with HORN FOLDING STAGES. Available in various sizes and designed for multiple use, HORN FOLDING STAGES "fill the bill" for all around school use. Write for details today!



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FORT DODGE, IOWA, U.S.A.

WORLD'S LARGEST MANUFACTURERS OF FOLDING STAGES, FOLDING PARTITIONS AND FOLDING GYMSEATS

WHAT'S NEW . . .

Modular School Furniture

A new line of multi-functional school furniture is being introduced. The line includes a movable desk and chair unit, a new trapezoidally shaped table, especially designed for group activities, a round table with circular bookshelf for kindergarten and library purposes, a universal table with bookboxes and utility tables in all standard top sizes.

All items in the line are designed for use in conjunction with each other, to take care of varying classroom needs. The multi-functional usage is achieved with plastic Natcolite tops on all desks and tables, with Nevamar laminates in wood grain patterns which have been especially developed for low uniform light reflectivity. All furniture in the line is made in honey maple and silver birch finishes and is available in standard sizes and standard heights, ranging from kindergarten through college needs. **National School Furniture Co., Dept. CUB, 2301 Hollins St., Baltimore 23, Md. (Key No. 399)**

Automatic Phonograph

The new Pentron 3-speed automatic phonograph is a portable unit offering fine sound reproduction. The high quality tone is the result of a unique baffle

system, high fidelity amplification and a slotted cone speaker. The automatic record changing mechanism plays and in-



termixes records of all three sizes and speeds. Shut-off is also automatic. The phonograph is enclosed in a durably constructed, luggage-type carrying case. **Pentron Corporation, Dept. CUB, 221 E. Fullerton, Chicago 16. (Key No. 400)**

Plumbing Maintenance Tool

Removable faucet seats can now be accurately reformed with the new type cutter for the patented Bibb Seat Re-

(Continued on page 84)

forming Tool. With the new tool, it is unnecessary to carry a large inventory of types and sizes of replacement seats and time is saved in searching for the proper size. With the new Sexauer Removable Seat Cutter, the same removable seat can be reformed three or four times, as needed, and the job of reseating can be done in three minutes. Use of the new cutter widens the seat, thus increasing the surface contact with the washer, producing easier shut-off and lengthening the life of the washer. **J. A. Sexauer Mfg. Co., Inc., Dept. CUB, 2503 Third Ave., New York 51. (Key No. 401)**

Insulated Safe Record Files

New four drawer legal and letter size Insulated Safe Record Files, labeled for withstanding standard one hour fire endurance, explosion and impact tests, are now available. They are especially designed for protecting vital records, confidential and restricted documents. Two steel spring-bolts securely hold each drawer closed for fire protection. In order to prevent unauthorized access to vital information the drawers may be equipped with corrugated key locks or combination locks. **Herring-Hall-Marvin Safe Co., Dept. CUB, Hamilton, Ohio. (Key No. 402)**

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School officials like the Duet Desk because it fits neatly in small or odd spaces or against walls...saves the cost of a second desk...its Simfast finish resists defacement by acids, coffee, ink stains and other

liquids, heat and cold...constructed of steel, it can take years of use and abuse...soundproof case and drawer slides...positive drawer stops that prevent damage when drawer is pulled out too far...encourages neatness...easy to clean.

For complete information about the 16 colors available, sizes, prices, see your equipment dealer. Or, mail the coupon.



Note how the Duet Desk gives each student two large bookshelves. Reference and textbooks are in plain sight and easy reach.
DESK ALSO AVAILABLE WITH LINOLEUM TOP.

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WHAT'S NEW . . .

Product Literature

- A colorful new 24 page 1952 Catalog of Monroe Folding Tables is available from The Monroe Company, 77 Church St., Colfax, Iowa. Featured is the Monroe De Luxe Folding Pedestal Banquet Table with rigid chassis, non-trip design, storage case, no knee interference and exclusive locking design. Also included is descriptive information on and illustrations of other Monroe folding tables and benches, as well as folding chairs and other equipment. The theme of the book is "Tomorrow's Tables Today." (Key No. 403)
- How punched-card users can speed-up and simplify the preparation of records and reports is discussed in a new 18 page illustrated folder issued by Remington Rand Inc., 315 Fourth Ave., New York 10. Detailed information is given on the Remington Rand Interfiling Reproducing Punch and the time and money saving which can be effected by its use. (Key No. 404)
- The new 1952 Athletic Equipment Catalog is now available from W. J. Voit Rubber Corp., 1600 East 25th St., Los Angeles 11, Calif. The 32 page booklet lists over 80 Voit items, including some new additions to the line such as the Safety Mouth Protectors, Adjustable Swim-Fins, Deluxe Custom Swim-Mask and other items. (Key No. 405)
- The special needs of educational institutions were considered in the preparation of a new 64 page catalog on "Westinghouse Laboratory Apparatus for Educational Institutions." Offered by the Westinghouse Electric Corp., Box 2099, Pittsburgh 30, Pa., the booklet lists for convenient reference those Westinghouse items that are adapted to use in educational laboratories. Detailed descriptive information is supplemented by drawings and illustrations, as well as information on electrical and mechanical construction. (Key No. 406)
- Eight new folders showing full color illustrations of four different patterns in chinaware are now available from The Walker China Co., Bedford, Ohio. One pattern is available in a choice of three different colors, two others in a choice of two colors. Each folder contains information on Walker Vitrified China. (Key No. 407)
- How "Smooth Ceilings System of Flat Slab Construction" is used in building is discussed and illustrated in a folder recently issued by Smooth Ceilings System, 802 Metropolitan Life Bldg., Minneapolis 1, Minn. Information is given on advantages and economies as well as basis of design, and diagrammatic drawings and charts supplement the descriptive text. (Key No. 408)
- Bulletin No. 138-C gives informative data on the Spencer Mop Vac Dry Mop Cleaners. Illustrations of the product by itself and in use are supplemented by full descriptive details. The bulletin is available from The Spencer Turbine Co., Hartford 6, Conn. (Key No. 409)
- "Tomorrow Is Today" is the title of a brochure recently released by the Brown Instrument Division, Minneapolis-Honeywell Regulator Co., Wayne & Windrim Aves., Philadelphia 44, Pa. Those concerned with research will find much helpful and informative data in this booklet on new and improved instruments and their importance in research and industry. (Key No. 410)
- Descriptive information and specifications on the Tornado Model 230 Noiseless Vacuum Cleaner are given in a folder issued by Breuer Electric Mfg. Co., 5124 N. Ravenswood Ave., Chicago 40. Photographs illustrate the various uses to which this unit can be put in an institution and the building maintenance and rug and upholstery attachments are illustrated and described. (Key No. 411)

Methods Manuals

The 1952 edition of the "Basketball Book for Scouting and Scoring" is now available from Hillyard Chemical Co., St. Joseph, Mo. New features, including special scouting and scoring pages designed by outstanding coaches, are included in this eighth edition. Over 100 illustrations of modern gymnasiums supplement the text which contains the latest technical information on official basketball signals for referees, manuals for basketball timers and scorers, charts for scorekeeping and diagramming of competitive play and the scouting of individual players. Included are technical aids for the treatment and maintenance of gymnasiums and helpful architects' specifications for finishing new gym floors, refinishing old floors and showing standard markings and proper court dimensions. (Key No. 412)

"Civil Defense Protective Equipment" is the title of a 28 page booklet published by Mine Safety Appliances Co., Pittsburgh 8, Pa. The booklet was developed in the belief that the effectiveness of civil defense rests on the individual and offers an outline of action for the various services required in case of emergency. Guidance for the booklet was obtained from records of countries subjected to aerial attack in World War II, the National Security Resources Board's Manual, United States Civil Defense, and the company's experience in safety service. Equipment needed for civil defense personnel is described in the booklet both practically and technically. (Key No. 413)

"The Theory of the Microscope" is the title of a new booklet issued by Bausch & Lomb Optical Co., Dept. FF 1, Rochester 2, N. Y. Written by James R. Bentorf, Head of the Microscope and Telescope Department of the company, the book presents a non-mathematical exposition of how a microscope works, with some notes on conditions which influence optical performance. Objectives, eyepieces, condensers, filters and types of illumination are treated in a non-technical manner and the text is illustrated with photographs and drawings. (Key No. 414)

A practical discussion of the importance of proper chemical laboratory fume hood installation is presented in a booklet, "Handle With Care All Laboratory Fume Removal Problems," recently issued by E. H. Sheldon Equipment Co., Muskegon, Mich. The carefully presented text is supplemented by drawings which illustrate the points made. Sheldon equipment designed to help solve this problem practically is mentioned. (Key No. 415)

A new 50 page handbook on the "Fundamentals of Magnetic Recording" is now available from Audio Devices, Inc., 444 Madison Ave., New York 22. The handbook has been written by C. J. Leel, an authority on audio engineering, and contains technical data on magnetic recording including background, recording methods, magnetic relationships, tape characteristics and many other subjects. The pocket-sized volume is illustrated with charts, curves and diagrams. (Key No. 416)

Suppliers' News

General School Equipment Co. is the new name of the manufacturer of school furniture formerly known as Bargen-Built Industries, Inc., 422 S. Twelfth St., Minneapolis 3, Minn.

Magic Chef, Inc., is the new name taken by the American Stove Co., 1641 S. Kingshighway Blvd., St. Louis 10, Mo.

Pittsburgh-DesMoines Steel Co., Pittsburgh 25, Pa., manufacturer of grandstands, announces the opening of a new office at 6399 Wilshire Blvd., Los Angeles, Calif. The office will be in charge of R. C. Ross.

Porter-Cable Machine Co., Syracuse 2, N. Y., announces the sale of the firm's floor sanding machine line to Clarke Sanding Machine Co., Muskegon, Mich. Acquisition of the Porter-Cable patent rights, tools and fixtures will give Clarke Sanding Machine Co. a full line of floor finishing and maintenance machines. Moving of the assets purchased by the Clarke group from Syracuse to Muskegon is now under way.

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Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

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465 Staples Company, H. F.
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466 Vonnegut Hardware Co., Van Duprin
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Fire & Panic Exit Devices

467 Vulcan-Hart Mfg. Company
Kitchen Equipment

468 Weis Mfg. Company, Inc., Henry
Cabinet Showers

469 Wyendotte Chemicals Corporation
Dishwashing Compound

WTIC—HARTFORD

discovers

disc recorders

are still

a must

Studio engineering supervisor Albert Jackson (right) along with maintenance engineer Fred Edwards (below) planned and installed WTIC's new PRESTO disc-recording studio.



wherever you go...

there's
PRESTO



Originally many stations across the nation thought that the advent of the tape recorder meant the eventual death of the disc. But, it didn't turn out that way! Convinced of the continuing need for disc recording and faced with an increased load of disc work, WTIC—Hartford's 50 kw station—decided to augment its disc equipment.

Having received 12 years of constant service from their PRESTO 3-A disc machines, WTIC naturally turned to PRESTO for its new equipment . . . two new 3-DG recorders, 92-B amplifiers and 160-B equalizers, along with a central console mounted between the recorders. Housed in its own studio, the new equipment turned out more than 400 recordings the first two months and is estimated to save the station \$1,000 a year by cutting microgroove reference discs.

A wide range of WTIC activities, including agency program auditions, special gift records for VIPs appearing on the air, recordings of network programs originating at the station, as well as community service shows for other Connecticut stations, keep WTIC's disc equipment turning almost constantly . . . proof that disc recorders are still very much in the spin!

PRESTO RECORDING CORPORATION
PARAMUS, NEW JERSEY

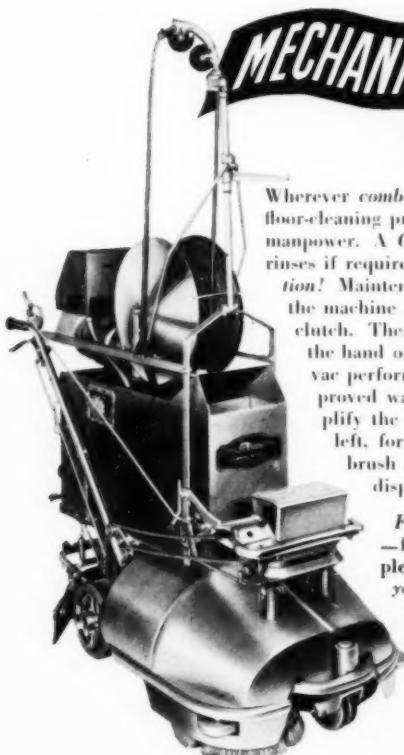
Expert Division:
25 Warren Street, New York 7, N. Y.

Canadian Division:
Walter P. Downs, Ltd.,
Dominion Square Bldg., Montreal



**Let's not clean away
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MECHANIZE your floor-cleaning with a
COMBINATION SCRUBBER-VAC!



Wherever combination-machine-scrubbing is the practical solution to the floor-cleaning problem, any lesser, slower method is wasteful of money and manpower. A Combination Scrubber-Vac applies the cleanser, scrubs, rinses if required, and picks up (damp-dries the floor) — *all in one operation!* Maintenance men like the *four-in-one feature* . . . also the fact that the machine is simple to operate. It's *self-propelled*, and has a *positive clutch*. There are no switches to set for *fast* or *slow* — slight pressure of the hand on clutch lever adjusts speed to desired rate. The powerful vac performs efficiently and quietly. Cable reel is self-winding. Improved waterproof wiring and minimum electrical connections simplify the cleaning of the machine. Model 213P Scrubber-Vac at left, for heavy duty scrubbing of large-area floors, has a 26-inch brush spread, and cleans up to 8,750 sq. ft. per hour! (Powder dispenser is optional.)

*Finnell makes Scrubber-Vac Machines in a full range of sizes — for small, vast, and intermediate operations. From this complete line, you can choose the size that's exactly right for your job (no need to *over-buy* or *under-buy*). It's also good to know that you can lease or purchase a Scrubber-Vac, and that there's a *Finnell man* nearby to help train your maintenance operators in the proper use of the machine . . . to recommend cleaning schedules for most effectual care . . . and to make periodic check-ups. For demonstration, consultation, or literature, phone or write nearest *Finnell Branch* or *Finnell System, Inc.*, 4402 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.*

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